Service
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For repair information of the Tape Deck see Service Manual LCA*1-4/1 (4822 725 23538)

Service Manual

12 V

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PHILIPS

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WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD).
Careless handling during repair may reduce life time of these components drastically.

ATTENTION
Static Sensitive Devices
Handle Only at Static
Safe Work Stations.

When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

Appropriate ESD equipment can be ordered under followings service codes:

• Anti-static table mat	large 1200 x 650 x 1,25 mm	4822 466 10953
	small 600 x 650 x 1,25 mm	4822 466 10958
• Anti-static wrist band		4822 395 10223
• Connection box (1 MΩ)		4822 320 11307
• Extendible cable (to connect wrist band to conn. box)		4822 320 11305
• Connecting cable (to connect table mat to conn. box)		4822 320 11306
• Earth cable (to connect any product to mat or box)		4822 320 11308
• Complete kit ESD3 (combining all above products)		4822 310 10671
• Wristband tester		4822 344 13999

NOTE

For EEPROM programming purposes a Gateway Interface will be available by the beginning of 1997 at the Service Centre Eindhoven. More information regarding this item will be published separately.

If you have any problems concerning Security Code, EEPROM programming or defective EEPROMs in the meantime, please forward the set to:

Car Systems Wetzlar
Department SP - CS
Philipsstraße 1
35576 Wetzlar
Germany

TECHNICAL DATA

Power Supply

Supply voltage:	9–15,6 V
Quiescent Current:	< 4 mA
Idle current (volume min.):	< 0,9 A
Output automatic antenna:	> 0,5 A

Tuner

Frequency range	FM: 87,5–108 MHz AM: 530–1620 kHz LW: 153–279 kHz
Input impedance:	150 Ω

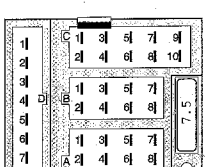
Cassette

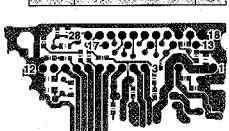
Deck:	LCA*1–4/1
Tape speed:	4,76 cm / sec
Wow & Flutter:	≤ 0,35 % RMS (+10 ... +45 °C)
Cross talk (track 2–3):	< -40 dB
Winding time:	≤ 115 sec (C60)
Number of tracks:	2 x 2
Channel separation: (track 1–2 / 3–4)	> 35 dB

Amplifier

Output power:	> 14 W (4 x 4 Ω / 14,4 V / 10 % THD)

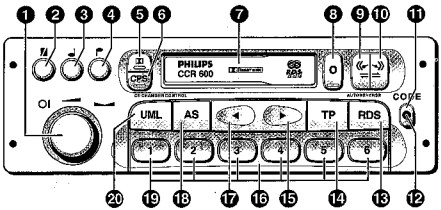
CONNECTION





A1 (24) : GALA	B1 (5) : RR+	C1 (23) : Display Data
A2 (21) : Steering Wheel Control	B2 (2) : RR-	C2 (22) : Display Clock
A3 (28) : Tel. Mute	B3 (7) : FR+	C3 (14) : Tel. Audio Input
A4 (19) : Ignition Key	B4 (6) : FR-	C4 (15) : Display MRQ
A5 (10) : Autom. Antenna	B5 (8) : FL+	C5 (27) : CAN Low
A6 (13) : Ext. Illumination	B6 (9) : FL-	C6 (16) : Diagnose
A7 (1) : Power Supply	B7 (3) : RL+	C7 (17) : CAN High
A8 (18) : GND	B8 (4) : RL-	C8 (20) : Ext. GND
		C9 (26) : CD L Input
D1- D7 : not connected		C10 (25) : CD R Input

CONTROLS



❶ **ON/OFF, Volume, Balance**
Push to switch the set On/Off.
Turn to adjust the volume level.
Pull and turn to adjust the balance.

❷ **Fader**
Push to release and engage the button.
Turn to adjust the fader.

❸ **Bass**
Push to release and engage the button.
Turn to adjust the low notes.

❹ **Treble**
Push to release and engage the button.
Turn to adjust the high notes.

❺ **Dolby**
Press to switch 'Dolby B' On/Off.

❻ **CPS**
Press to switch the 'Cassette Program Search' On/Off in cassette mode.
Press to select 'Random Playback' in CD changer mode.

❼ **Cassette Opening**

❽ **Source Selection**
Press to pass through tuner, cassette and CD mode.

❾ **FRW**
Push for fast rewind in cassette mode (tuner reception during wind).
Push to rewind to the beginning of the actual track in CPS mode (no tuner reception during wind).
Push half-way in to stop fast forward and continue playback.

❿ **FFW**
Push to wind fast forward in cassette mode (tuner reception during wind).
Push to wind forward to the beginning of the next track in CPS mode (no tuner reception during wind).
Push half-way in to stop fast rewind and continue playback.

Push FRW and FFW button (❾ & ❿) simultaneously to eject the cassette.
Push FRW and FFW button (❾ & ❿) simultaneously half-way in to reverse play direction.

⓫ **Detach Release**
Push to release the control panel.

⓬ **Blink LED**
Blinking while the set is switched OFF and the security code is activated.

⓭ **RDS**
Push briefly to switch RDS On/Off. Default : RDS ON.
Keep pressed for 2 sec to start FM Station Memory.

⑭ **TP**
Press to switch TP On/Off.
Press to delete current traffic announcement without switching TP-mode Off.
Press twice briefly to delete current traffic announcement and to switch TP Off.

⑮ **Search Up**
AM or FM while RDS & TP switched OFF:
keep pressed for coarse tuning till desired frequency range is reached,
press briefly for stepwise tuning upwards,
keep pressed for about 1 sec to start automatic search upwards.
FM while RDS switched OFF:
keep pressed for about 1 sec to start automatic search upwards.
FM while RDS switched ON:
push briefly to scroll FM Station Memory,
keep pressed for about 1 sec to start automatic search upwards.
CD changer:
push briefly to select next track.

⑯ **Detachable Control Panel**

⑰ **Search Down**
AM or FM while RDS & TP switched OFF:
keep pressed for coarse tuning till desired frequency range is reached,
press briefly for stepwise tuning downwards,
keep pressed for about 1 sec to start automatic search downwards.
FM while RDS switched OFF:
keep pressed for about 1 sec to start automatic search downwards.
FM while RDS switched ON:
push briefly to scroll FM Station Memory,
keep pressed for about 1 sec to start automatic search downwards.
CD changer:
Push briefly to select previous track.

⑱ **AS**
Push briefly to switch to Autostore band (FM or MW).
Keep pressed for 2 sec to start Autostore procedure (FM or MW).

⑲ **Preset Keys**
Push briefly to select prestored station.
Keep pressed for 2 sec to store current station into the preset concerned.
Keep pressed for 5 sec to switch REG On /Off for the preset concerned. The status will be displayed briefly. Default : REG OFF. If REG ON is selected, this will be displayed briefly after calling this preset.
Push to select disk in CD changer mode.

⑳ **UML**
Press to pass through the wavebands (U → M → L → U →...).
Press to return from Autostore band to non Autostore band.
Keep pressed for about 1 sec in RDS mode to display the station frequency.
Press briefly in cassette or CD mode to display the actual tuner station for 5 sec.

ADDITIONAL FEATURES

Security Code

Getting set into operation after interruption of power supply

After switching the set On the display shows "SAFE". Switch On the ignition and keep the AS key ⑱ pressed while switching the set On once again with the ON/OFF switch ❶ until you hear the confirmation beep. The display shows "10 ----", where 10 is the number of remaining attempts. Enter the correct CODE with the aid of preset keys 1 to 4 and confirm by keeping the AS key pressed for 3 sec.

If a wrong CODE has been entered, the display shows "9 SAFE" for a certain period, depending on the remaining attempts, and then "9 ----".

The SAFE period lasts 10 sec after the first two wrong attempts, 10 min after the third attempt, then the time is doubled up to 640 min after the ninth attempt. After ten unsuccessful attempts the set is blocked, the EEPROM has to be reprogrammed.
The set must not be switched Off during the SAFE period, otherwise the timer will start from the beginning.

Decoding

Decoding is only possible, when the ignition is switched ON.
Switch the set On while keeping the AS key ⑱ pressed until you hear the confirmation beep.
The display shows "CODE" and then "1 0 ----". Proceed as described above.

Coding

Proceed as described in 'Decoding'.
Every time the set is switched On the display briefly shows "CODE".

CD Changer Security Code

Getting CD changer into operation after interruption of power supply

If the CD changer is connected to the radio the display shows "CD-SAFE" after selecting CD changer with the source key. Switch the ignition On and keep the source key ⑤ pressed while switching the set On once again with the ON/OFF switch ❶ until you hear the confirmation beep.
The display shows "1 0 ----", where 10 is the number of remaining attempts. Enter the correct CODE with the aid of preset keys 1 to 4 and confirm by keeping the source key pressed for 3 sec.

Decoding

Decoding is only possible, when the ignition is switched ON.
Switch the set On while keeping the source key ⑤ pressed until you hear the confirmation beep.
The display shows "CD-CODE" and then "1 0 ----". Proceed as described above.

Coding

Proceed as described in 'Decoding'.

Automatic Switch-On

If this feature is enabled, the set may either be switched On/Off by the power switch or by the ignition key.
If it is disabled, the set may be switched On/Off only by the power key.

To enable/disable the 'Automatic Switch-On' keep preset keys 1 and 3 pressed while switching the set On with the power switch until you hear the confirmation beep. The display shows "IGNI ON" or "IGNI OFF" resp..

The 'Automatic Switch-On' is always enabled after disconnecting the set from the power supply.
Enabling/disabling has no influence on the '1 hour Switch Off' timer which is always enabled.

Speed Dependent Volume Control

Keep UML key ⑳ pressed for 3 sec until you hear the confirmation beep. Use search keys ⑯ or ⑰ to adjust the desired setting between "SD-VOL 0" and "SD-VOL +5".
Keep UML key pressed again for 3 sec to store the new setting. After 10 sec without activating any key the set will automatically return to normal operation without change.

Impulse Setting

To choose the desired setting keep the UML ⑳ and Preset 1,2 or 3 keys pressed while switching the set On until you hear the confirmation beep. The status will be displayed briefly.

Setting 1: 2500 pulses / km
Setting 2: 16000 pulses / km
Setting 3: 25000 pulses / km

Telephone

The display shows "PHONE" anytime a call comes in or goes out.

Adjusting the telephone level for hands-free operation

If the hands-free operation is used, the telephone audio signal is processed via the car radio.

Adjust the volume level by keeping TP key ⑭ pressed while switching the set On until you hear the confirmation beep. Use search keys ⑮ or ⑰ to adjust the desired setting between "PH-VOL -3" and "PH-VOL +3".
Keep TP key pressed again for 3 sec to store the new setting. After 10 sec without activating any key the set will automatically return to normal operation without change.

The hands-free operation has priority over Traffic Announcements:
If [TP] is activated during a phone call, the station name is displayed instead of "PHONE" during a Traffic Announcement, but telephone will be heard via the loudspeakers.
With the aid of the TP key one can select either telephone or Traffic Announcement reproduction.

TA Volume Level

Keep TP key ⑭ pressed for 3 sec until you hear the confirmation beep. Use search keys ⑮ or ⑰ to adjust the desired setting between "TP-VOL -3" and "TP-VOL +3".
Keep TP key pressed again for 3 sec to store the new setting. After 10 sec without activating any key the set will automatically return to normal operation without change.

Display Logic

Keep presets 4 and 6 pressed while switching the set On to toggle between 8 and 10 digit display until you hear the confirmation beep. The status will be displayed briefly.

MW Tuning Step Setting

Keep presets 2 and 5 pressed while switching the set On to toggle between 9 and 10 kHz tuning steps until you hear the confirmation beep. The status will be displayed briefly.

STEERING WHEEL CONTROLS

The SWC works in parallel to the radio controls and applies a DC voltage to pin A2 of the connector block. (Refer to SPECIFICATION CHECK)

❶	⟶	Increment preset number of selected wave band / Select next disc in CD changer mode
❷	◀	Search downwards / Select previous track in CD changer mode
❸	▶	Search upwards / Select next track in CD changer mode
❹	+	Volume Up
❺	–	Volume Down
❻	o	Select Source

SPECIFICATION

General

Supply voltage:	9 ... 15,6 V
Quiescent current, LED off:	< 4 mA
Idle current, FM mode, volume min.:	< 500 mA
Autom. antenna output:	13,5 V; min. 0,5 A
Output power (14,4 V; 10 % THD):	> 14 W
Different source level:	(FM: 98 MHz; 22,5 kHz; 400 Hz; 1 mV) (AM: 1053 kHz; 30 %; 400 Hz; 1 mV) (CC: 400 Hz; 200 nW/m; Dolby level) (CC: 315 Hz; 250 nW/m; 0 dB level) (CD: 0 dB; 1 kHz; test disc)
FM:	ref.
AM:	4,5 dB ± 2 dB
CC Dolby level:	12,5 dB ± 2 dB
CC 0 dB level:	14,5 dB ± 2 dB
CD:	18,5 dB ± 2 dB
Channel difference:	0 dB ± 1,5 dB
TA volume level (1 kHz):	10 mW ± 2,5 dB
Range:	± 7,5 dB
Grid:	2,5 dB
Frequency response (5 W / 4 Ω; 1 kHz; 22,5 kHz):	
FM -3 dB:	40 Hz ... 15 kHz
AM -3 dB:	80 Hz ... 2,5 kHz
Telephone mute:	Low-active (< 1,8 V)
Input current when active:	1 mA ... 3 mA
Telephone volume (PH level 0):	- 10 dB (ref. to input voltage)
Telephone input sensitivity:	0,1 ... 6 V
Range:	± 7,5 dB
Grid:	2,5 dB

Tuner

Aerial input impedance:		150 Ω
Frequency range:	FM:	87,5 ... 108 MHz
	MW Europe:	531 ... 1602 kHz
	MW USA:	530 ... 1620 kHz
	LW:	153 ... 279 kHz
Bands / Presets:		FM / 6 FM AS / 6 MW / 6 MW AS / 6 LW / 6
26 dB S/N sensitivity	FM:	< 11 dBµV
	AM:	< 30 dBµV
S/N ratio at 1 mV	FM mono:	> 55 dB
	FM stereo:	> 45 dB
	AM:	> 45 dB
α - 3 dB:		13 dBµV ± 3 dB

FM stereo separation:	> 28 dB
Signal dependent stereo 10 dB:	43 dBµV ± 3 dB

Search grid:	Autostore	autom.	man.
FM-band	100 kHz	100 kHz	100 kHz
MW-band Europe	9 kHz	9 kHz	1 kHz
MW-band USA	10 kHz	10 kHz	1 kHz
LW-band	—	3 kHz	1 kHz

Automatic search level	
FM AS:	28 dBµV (24 µV)
FM 1:	52 dBµV (420 µV)
FM 2:	46 dBµV (200 µV)
FM 3:	40 dBµV (100 µV)
FM 4:	20 dBµV (10 µV)
AM AS:	23 dBµV (15 µV)
AM 1:	52 dBµV (420 µV)
AM 2:	46 dBµV (200 µV)
AM 3:	40 dBµV (100 µV)
AM 4:	23 dBµV (15 µV)

Distortion (98 MHz; 75 kHz; 1 mV):	< 1,5 %
(1053 kHz & 207 kHz; 95 %; 1 mV):	< 2,0 %

Cassette

Tape speed:	4,76 cm / s
Drift (TEAC MTT 211A):	+3 .. -1 %
Flutter (TEAC MTT 211A):	< 0,35 % (+10 ... +45 °C)
Winding time (C60):	< 115 s
S/N ratio (TEAC MTT 212N):	
w/o Dolby, Cr:	nom. > 48 dB
Dolby B, Cr:	nom. > 56 dB
Channel separation (TEAC MTT 141N):	> 35 dB
X-Talk (TEAC MTT 121N):	> 40 dB

Steering wheel control

Idle current:	< 10 µA
Current consumption one key depressed:	< 10 mA
Control voltages:	
Volume down key:	0,73 V ± 0,1 V
Volume up key:	1,28 V ± 0,1 V
Source key:	1,85 V ± 0,1 V
Search up key:	2,43 V ± 0,1 V
Search down key:	3,05 V ± 0,1 V
Next key:	3,66 V ± 0,1 V
Diagnosis:	4,25 V ± 0,1 V

ON / OFF LOGIC

	> 3,8 V	> 3,8 V	< 0,5 V	< 0,5 V
	= 0 V	= 0 V	= 5 V	= 5 V
	= 5 V	= 5 V	= 5 V	= 5 V
	= 0 V	= 0 V	= 5 V	= 5 V
	= 0 V	> 2,7 V	= 0 V	> 2,7 V
	> 3,4 V	> 3,4 V	= 0 V	= 0 V
	> 3,0 V	> 3,0 V	= 0 V	= 0 V

If one or more of these conditions are not fulfilled the On / Off logic will not work properly.

ADJUSTMENTS

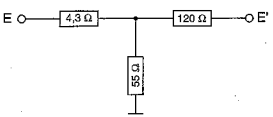
Perform all adjustments and measurements under following conditions, if not otherwise stated:

Power supply: 14,4 V

FM: RF = 98,0 MHz; m = 22,5 kHz; AF = 1 kHz; Level = 1 mV
Stereo: pilot = 9 % (6,75 kHz)
RDS: carrier = 1,7 %
Aerial: 150 Ω; -6 dB standard aerial (set E = E')

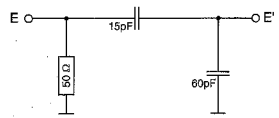
AM: RF = 1053 kHz; m = 30 %; AF = 1 kHz; Level = 1 mV
Aerial: -14 dB standard aerial; **for measurements adjust 14 dB offset**

FM Aerial -6 dB:



Note: Set E = E'

AM Aerial -14 dB:



Note: Adjust offset = 14 dB

How to adjust the noise detector

RF = 98 MHz; m = 75 kHz; AF = 40 kHz; Level = 1 mV
Adjust pot 3426 to get an output of 850 mV (AC) at pin 14 of IC 7420.

Dolby level

Use the test cassette TEAC MTT150 to adjust the Dolby level.
Set pot 3540 and 3543 to get an output of 387,5 mV (AC) at pins 1 and 24 of the Dolby IC (Pos. 7510).

EEPROM PARAMETER SETTINGS TABLE

No	Function	Range	Grid	def. Value	def. PAR	Eeprom Address
Tuner Adjustment						
10	TP maximum time out / auto tuning time cycle	01 ÷ 0F H/ 10 ÷ 150 s	10 s	60 s	06 H	37 H
RDS Parameter						
16	Synchronization break down time out cycle during TA	01 ÷ 0F H/ 10 ÷ 150 s	10 s	120 s	0C H	41 H
17	TP-EON acceptance level for TA	35 ÷ FF H		38 dBµV	95 H	38 H
18	FM-Memory, Non-RDS station acceptance level	35 ÷ FF H 20 ÷ 60 dBµV		36 dBµV	8A H	31 H
19	LV = Field strength reaction level	00 ÷ 06 H	synthetic		03 H	34 H
20	MP = Multipath reaction level	00 ÷ 06 H	values for		03 H	36 H
21	REL = Suppression counter release	40 ÷ C0 H	receiver		60 H	33 H
22	SUPP = Suppression counter	10 ÷ C0 H	sub-		96 H	32 H
23	NS = Noise reaction level	00 ÷ 06 H	system		03 H	35 H
24	AF check agility static	11 ÷ 30 H/ 12 ÷ 4,4 min			1A H	3D H
25	AF check agility dynamic	02 ÷ 05 H/ 0,2 ÷ 0,5 s	0,1 s	0,4 s	04 H	3E H
26	Minimum duration between AF checks	02 ÷ 14 H/ 0,2 ÷ 2 s	0,2 s	0,8 s	04 H	3F H
27	AF minimum quality base	5A ÷ 80 H	synth. val		74 H	40 H
Audio Control						
31	TA Bass level	00 ÷ 06 H/ -6 dB ÷ +6 dB	± 2 dB	+2 dB	04 H	45 H
32	TA Treble level	00 ÷ 06 H/ -6 dB ÷ +6 dB	± 2 dB	-2 dB	02 H	46 H
33	TA Fader level (Rear to Front)	00 ÷ 06 H/ -15 ÷ 0 dB	2,5 dB	-2,5 dB	05 H	44 H
34	Telephone Bass level	00 ÷ 06 H/ -6 dB ÷ +6 dB	± 2 dB	0 dB	03 H	4B H
35	Telephone Treble level	00 ÷ 06 H/ -6 dB ÷ +6 dB	± 2 dB	-2 dB	02 H	4C H
36	Telephone Fader level (Rear to Front)	00 ÷ 06 H/ -15 ÷ 0 dB	2,5 dB	-2,5 dB	05 H	4A H
37	Power-On Volume level	00 ÷ 1A H/ -80 ÷ 0 dB	table 4, page 12	-37 dB	06 H	50 H
Speed Dependent Control						
41	SD-FRQ1 (v1) / + 2 dB Bass	00 ÷ FF H/	1 km/h	70 km/h	46 H	55 H
42	SD-FRQ2 (v2) / + 2 dB Bass	0 ÷ 255 km/h		120 km/h	78 H	56 H
43	SD-FRQ3 (v3) / + 2 dB Bass			40 km/h	28 H	57 H
44	SD-FRQ4 (v4) / + 2 dB Bass			90 km/h	5A H	58 H
45	SD-FRQ5 (v5) / + 2 dB Bass			140 km/h	8C H	59 H
Illumination						
51	Illumination Logic A/B	00, 01 H/ A, B		Logic A	00 H	5A H
52	Illumination level X0	00 ÷ FF H			01 H	5B H
53	Illumination level Y0				00 H	5C H
54	Illumination level X1				4B H	5D H
55	Illumination level Y1				0A H	5E H

TEST MODE

Start the Test Mode by keeping the RDS key pressed for 5 sec while the set is switched ON, independent of the actual source, however the diagnostics must not be active.
The hardware and software identification number will be displayed for 1 sec, after that the RDS-signal quality will be evaluated acc. to table 1.

During the Test Mode all tuner features are accessible, except RDS On/Off. To leave the Test Mode keep the RDS key pressed again for 5 sec or switch the set Off.

Display	Description	Range
HHHHSSSS	HHHH = hardware number SSSS = software number	
AQSXFFF.F	A = field strength Q = quality S = suppression counter X = switching reasons FFF.F = frequency	6 - F (ref. to table 2) 0 - F 0 - F 0 - F (ref. to table 3) MHz
CPS	CPS = RDS sync. state	on = locked
□□	□□ = PI code verification	on = verified
Cr/LED	Cr/LED = AF change request	on = request

Table 1: Test Mode

Display	Level
F	> 60 dBµV
E	> 55 dBµV
D	> 50 dBµV
C	> 45 dBµV
B	> 40 dBµV
A	> 35 dBµV
9	> 30 dBµV
8	> 25 dBµV
7	> 20 dBµV
6	< 20 dBµV

Table 2: Field Strength Indication

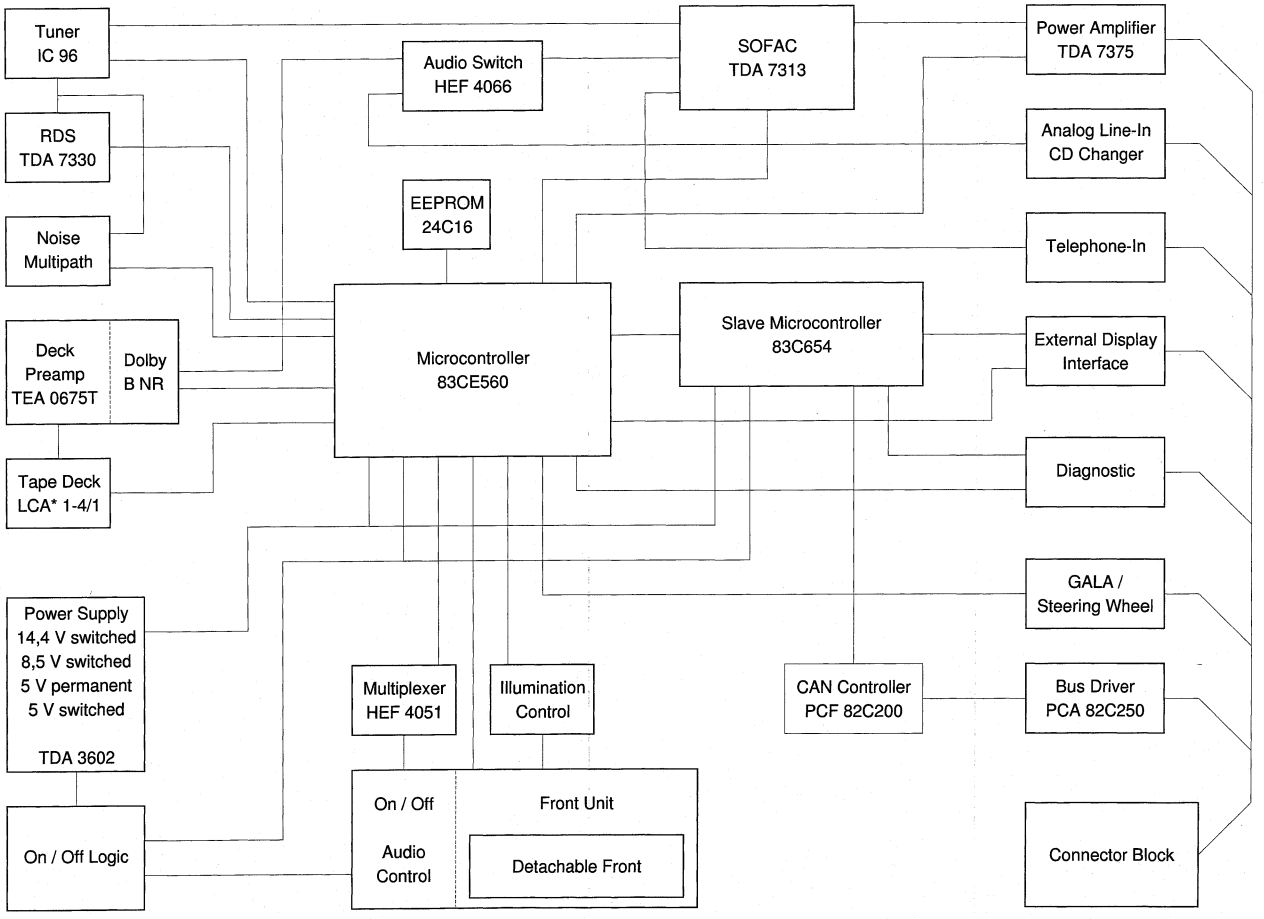
Display	Switching Reason
0	not used
1	weak field strength
2	weak multipath
3	weak field strength and weak multipath
4	strong multipath
5	strong multipath and weak field strength
6	very strong multipath
7	very strong multipath and weak field strength
8	adjacent channel distortion
9	adjacent channel distortion and weak field strength
A	adjacent channel distortion and weak multipath
B	adjacent channel distortion, weak field strength and weak multipath
C	adjacent channel distortion and strong multipath
D	adjacent channel distortion, strong multipath and weak field strength
E	adjacent channel distortion and very strong multipath
F	adjacent channel distortion, very strong multipath and weak field strength

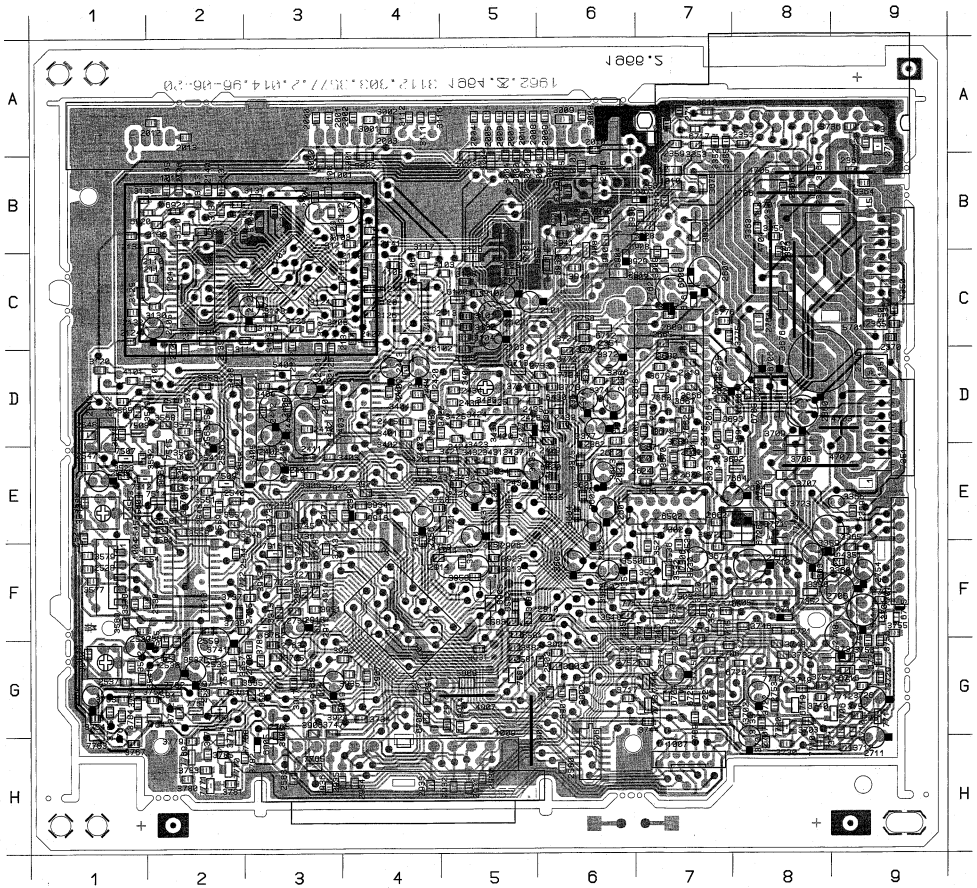
Table 3: Switching Reason Indication

Digits	Level
00	-88 dB
01	-55 dB
02	-45 dB
03	-40 dB
04	-39 dB
05	-38 dB
06	-37 dB
07	-35 dB
08	-34 dB
09	-32 dB
0A	-31 dB
0B	-30 dB
0C	-28 dB
0D	-27 dB
0E	-26 dB
0F	-25 dB
10	-24 dB
11	-23 dB
12	-22 dB
13	-20 dB

Table 4: Volume level

BLOCK DIAGRAM




1 2 3 4 5 6 7 8 9
A
B
C
D
E
F
G
H

1001 A4	2138 B4	2529 F1	2717 A7	3105 D5	3423 D5	3577 F1	3731 G9	3906 G3	5701 C8	7513 F7
1002 E7	2139 D2	2530 F1	2718 A9	3106 C4	3424 D5	3578 F1	3732 G8	3907 C7	5905 F5	7514 E2
1004 F1	2140 B2	2531 G1	2719 B7	3107 C3	3425 D5	3579 F1	3733 E3	3908 C7	5909 G5	7515 E2
1005 F8	2141 B4	2532 G2	2730 G3	3108 C3	3426 D5	3580 F1	3734 G4	3909 E3	6100 C5	7516 D2
1006 G7	2351 D6	2533 G2	2731 E3	3109 B3	3430 E5	3581 E2	3735 G8	3910 A7	6102 C5	7581 G5
1007 H7	2352 G7	2534 G2	2732 A9	3110 B2	3431 E5	3582 G5	3736 A9	3912 B2	6420 E6	7601 D7
1009 H4	2353 A8	2535 E1	2733 D6	3111 A4	3432 E5	3583 F5	3737 F3	3913 F3	6430 D6	7662 D7
1010 A8	2354 A7	2536 D2	2751 G9	3112 A4	3433 E5	3584 F5	3738 F2	3914 G5	6502 E7	7663 D7
1012 C3	2355 E8	2537 G1	2752 G7	3113 B2	3434 E5	3585 G2	3739 E3	3915 F3	6581 F5	7664 E8
1103 B3	2356 C8	2538 G2	2753 G8	3114 C3	3435 D5	3586 F6	3740 G8	3916 E4	6582 F5	7701 F9
1104 C2	2357 D6	2539 E2	2754 F9	3115 C4	3436 D6	3587 G3	3741 G2	3917 G3	6601 D8	7706 G9
1350 C9	2358 D6	2540 E2	2755 F2	3116 A4	3437 E5	3601 E6	3742 F3	3918 G3	6704 G7	7710 H8
1351 D9	2359 A7	2541 E2	2756 E4	3117 C4	3438 E6	3602 E6	3743 F3	3919 B7	6705 D8	7711 G9
1402 D3	2360 D8	2542 D1	2757 E5	3118 C3	3439 D5	3603 E6	3744 G7	3920 F5	6706 D8	7712 G9
1911 F5	2362 D6	2543 D1	2758 C6	3119 C3	3518 F6	3604 E6	3745 E3	3924 G3	6708 G4	7713 G7
2000 A3	2363 F8	2544 F2	2759 F3	3120 D1	3520 F7	3660 E7	3746 F8	3928 B7	6710 G9	7714 E8
2001 A3	2364 B8	2545 E1	2760 G1	3121 B4	3523 E1	3666 D7	3747 G3	3929 C7	6711 F8	7715 F7
2002 A4	2365 C9	2546 E2	2761 G1	3122 B3	3525 F7	3667 D7	3748 G8	3930 B7	6712 C6	7716 F7
2003 A4	2366 B8	2547 E1	2762 C7	3123 C3	3527 F7	3670 E7	3749 G8	3931 G5	6713 D5	7717 F6
2004 A5	2367 B9	2548 D1	2763 G3	3124 C3	3530 F7	3671 E7	3750 E4	3932 G4	6714 F9	7718 G7
2005 A5	2368 B8	2559 F2	2764 C8	3125 C1	3531 F7	3672 E7	3751 G9	3934 E4	6715 F9	7719 G8
2006 A5	2369 E9	2580 H6	2765 G3	3126 B6	3532 F7	3674 F7	3752 G9	3935 G4	6716 G9	7720 G8
2007 A5	2370 C9	2581 G5	2901 G6	3127 B3	3536 F7	3675 B7	3753 G9	3936 B7	6717 A7	7721 E5
2008 A5	2371 C2	2582 B7	2902 G6	3130 C2	3537 G2	3676 C8	3754 G9	3937 C7	6718 F3	7722 F3
2009 A6	2372 C3	2583 H3	2906 F5	3131 B3	3538 G1	3678 D7	3755 F9	3938 C6	6719 G8	7723 F3
2010 A6	2373 C3	2601 E6	2907 G4	3135 B1	3539 E1	3679 D7	3756 G9	3939 C6	6720 G8	7724 D6
2011 A5	2401 E3	2602 F6	2908 F3	3136 B2	3540 G1	3680 D7	3757 G8	3940 B6	6721 F8	7760 G2
2012 A2	2402 D3	2603 E7	2909 E4	3137 B2	3541 G1	3688 E7	3758 E4	3941 B6	6722 G7	7761 G2
2013 A2	2403 D3	2604 E8	2910 F6	3352 A7	3542 G1	3689 D7	3759 E4	3943 B6	6723 G7	7762 G2
2101 C5	2404 D3	2605 F6	2911 G5	3353 A7	3543 E1	3690 E7	3760 G2	3944 C6	6724 E3	7763 G1
2102 C5	2405 D4	2606 D7	2912 G4	3355 A7	3544 G2	3691 D7	3761 G2	3951 F3	6726 E8	7764 G2
2103 C5	2406 E3	2607 C7	2913 F5	3356 B8	3545 G2	3692 E8	3762 G2	3958 F5	6761 C7	7765 H3
2104 B2	2407 D4	2609 C7	2914 F4	3357 G2	3546 E2	3693 D8	3763 G1	4100 D2	6762 F3	7768 G2
2105 C2	2408 D3	2610 D7	2915 F3	3358 F8	3547 E2	3701 H8	3764 G1	4101 D1	6904 C6	7769 H2
2106 B6	2409 D4	2611 E7	2916 F3	3359 F8	3548 F6	3702 G8	3765 G1	4102 C4	6905 H3	7770 H2
2107 B6	2410 D3	2612 E6	2917 E3	3360 F9	3549 D1	3703 G8	3766 G1	4103 C5	6907 B7	7771 H2
2108 B3	2411 E3	2613 D6	2918 C6	3361 B8	3550 F7	3705 F7	3767 H1	4351 F9	6908 B7	7906 H6
2109 B3	2412 D3	2614 C7	2919 G3	3362 C9	3551 E2	3706 G7	3769 G7	4401 D4	6909 C7	7907 C6
2110 B2	2413 D4	2615 D7	2923 F5	3363 B8	3552 E1	3707 E8	3770 E8	4701 B8	6920 B2	7908 B6
2111 C2	2414 D4	2616 D7	2930 H5	3364 B9	3553 D2	3708 E8	3771 E8	4702 C8	6921 B2	7909 B6
2113 C5	2415 D4	2617 D7	2931 H5	3365 E9	3554 F2	3709 D8	3772 D6	4703 D9	6922 B2	7910 B6
2115 C5	2420 D4	2618 D7	2932 H5	3366 E9	3555 E2	3710 F8	3773 D6	4704 C8	7102 C4	7911 F4
2116 B4	2421 E4	2619 D7	2933 H4	3370 D6	3556 E2	3711 G9	3774 D5	4705 B8	7103 C3	7912 E3
2120 C4	2423 D4	2620 D7	2934 H4	3371 D6	3557 E2	3712 H9	3775 C7	4706 B8	7104 C2	7915 F3
2121 C4	2424 D5	2621 E6	2935 H3	3372 C6	3558 E2	3713 G7	3776 C7	4707 E8	7105 B5	
2122 C3	2425 D5	2622 E6	2936 H3	3373 D6	3559 E2	3714 G7	3777 H2	4902 G5	7350 C9	
2123 C2	2426 E5	2624 E7	3000 B5	3374 D6	3560 E1	3715 G7	3778 H2	4906 E5	7351 D9	
2124 C1	2427 D5	2625 D7	3001 A4	3375 E6	3563 E1	3716 G7	3779 H2	4907 G5	7352 F8	
2125 C3	2428 D5	2626 E7	3002 A4	3376 D6	3564 E2	3717 G6	3780 H2	4910 F3	7401 D3	
2126 C4	2429 D6	2627 D7	3003 B5	3377 E6	3565 D1	3719 G7	3781 H2	4911 G3	7403 D4	
2127 C4	2430 E5	2662 E7	3004 B5	3400 D5	3566 D2	3720 F7	3782 H2	5000 B3	7420 D5	
2128 C5	2431 E5	2665 C7	3005 B6	3401 D4	3567 D2	3721 F7	3783 H2	5001 B3	7503 F7	
2129 C4	2432 E5	2701 F9	3006 B6	3402 D4	3568 D2	3722 G8	3784 G1	5002 B4	7504 F7	
2130 C4	2433 D6	2702 F9	3007 B6	3403 E3	3569 D2	3723 E8	3785 H2	5003 B5	7505 F6	
2131 C3	2434 D5	2706 F9	3008 A6	3404 D4	3570 E2	3724 C6	3786 G3	5004 B5	7506 F7	
2132 C1	2435 D5	2707 H8	3009 A6	3405 E3	3571 D2	3725 G3	3787 G2	5103 C3	7507 E1	
2133 B1	2437 E5	2708 F9	3100 C5	3406 D3	3572 D2	3726 G9	3901 G6	5104 B3	7508 D1	
2134 C4	2438 D5	2710 F8	3101 C5	3408 D2	3573 F7	3727 F3	3902 G6	5105 C2	7509 E2	
2135 B2	2440 D3	2711 H9	3102 C5	3420 E4	3574 E4	3728 G9	3903 G6	5106 C5	7510 F2	
2136 B2	2527 E1	2715 G7	3103 C5	3421 E5	3575 E2	3729 G9	3904 G6	5107 B6	7511 G2	
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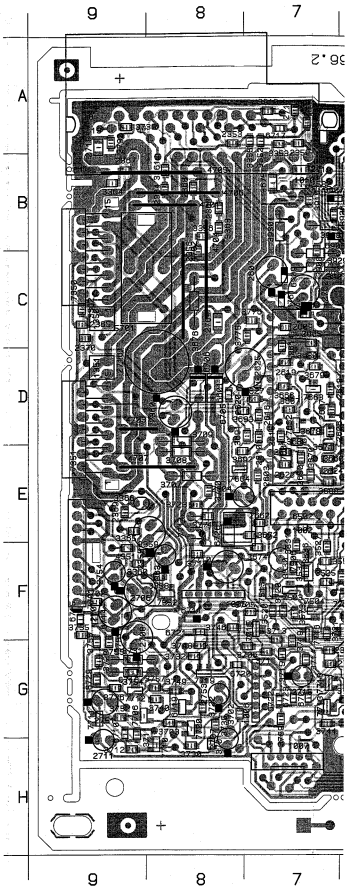

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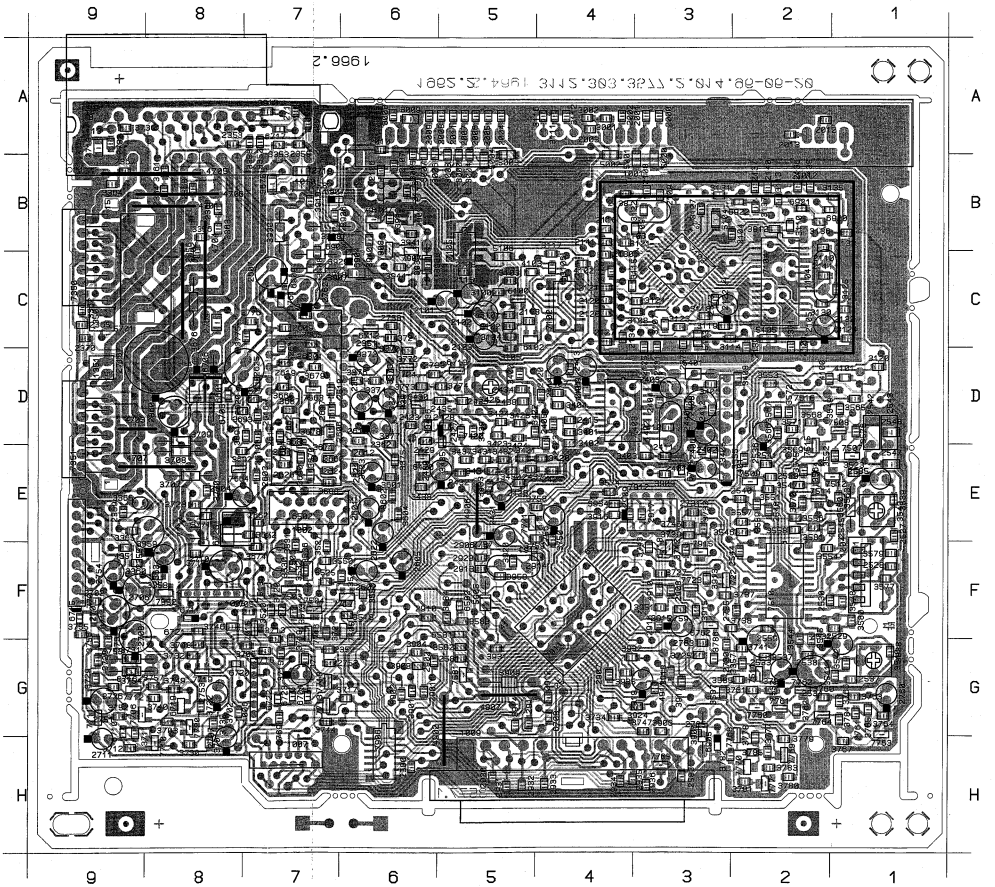
3909 E3	6100 C5	7516 D2
3910 A7	6102 C5	7581 G5
3912 B2	6420 E6	7601 D7
3913 F3	6430 D6	7662 D7
3914 G5	6502 E7	7663 D7
3915 F3	6581 F5	7664 E8
3916 E4	6582 F5	7701 F9
3917 G3	6601 D8	7706 G9
3918 G3	6704 G7	7710 H8
3919 B7	6705 D8	7711 G9
3920 F5	6706 D8	7712 G9
3924 G3	6708 G4	7713 G7
3928 B7	6710 G9	7714 E8
3929 C7	6711 F8	7715 F7
3930 B7	6712 C6	7716 F7
3931 G5	6713 D5	7717 F6
3932 G4	6714 F9	7718 G7
3934 E4	6715 F9	7719 G8
3935 G4	6716 G9	7720 G8
3936 B7	6717 A7	7721 E5
3937 C7	6718 F3	7722 F3
3938 C6	6719 G8	7723 F3
3939 C6	6720 G8	7724 D6
3940 B6	6721 F8	7760 G2
3941 B6	6722 G7	7761 G2
3943 B6	6723 G7	7762 G2
3944 C6	6724 E3	7763 G1
3951 F3	6726 E8	7764 G2
3958 F5	6761 C7	7765 H3
4100 D2	6762 F3	7768 G2
4101 D1	6904 C6	7769 H2
4102 C4	6905 H3	7770 H2
4103 C5	6907 B7	7771 H2
4351 F9	6908 B7	7906 H6
4401 D4	6909 C7	7907 C6
4701 B8	6920 B2	7908 B6
4702 C8	6921 B2	7909 B6
4703 D9	6922 B2	7910 B6
4704 C8	7102 C4	7911 F4
4705 B8	7103 C3	7912 E3
4706 B8	7104 C2	7915 F3
4707 E8	7105 B5	
4902 G5	7350 C9	
4906 E5	7351 D9	
4907 G5	7352 F8	
4910 F3	7401 D3	
4911 G3	7403 D4	
5000 B3	7420 D5	
5001 B3	7503 F7	
5002 B4	7504 F7	
5003 B5	7505 F6	
5004 B5	7506 F7	
5103 C3	7507 E1	
5104 B3	7508 D1	
5105 C2	7509 E2	
5106 C5	7510 F2	
5107 B6	7511 G2	
5401 D3	7512 E1	

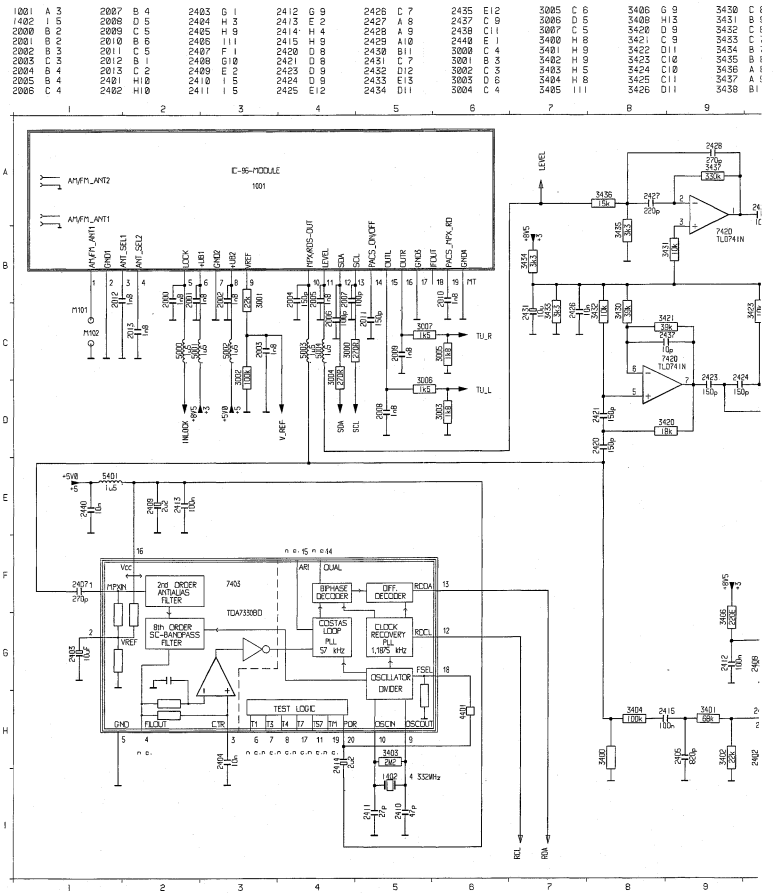


INTERCONNECTION TABLE

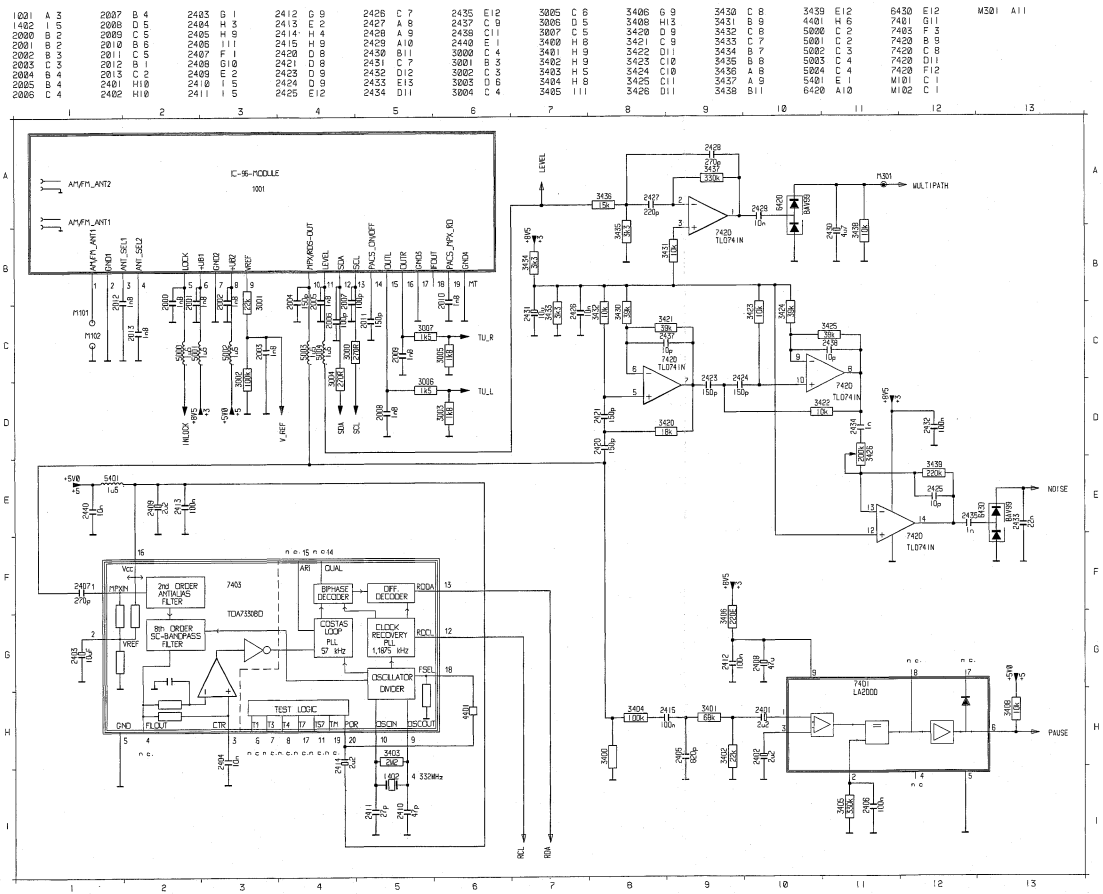
Terminal	Pages	Terminal	Pages	Terminal	Pages
A/D_EXP_1	20,22	FSDA	20,21,23b	reset654	20,21
A/D_EXP_2	20,22	FSDA1	21,23b	RHEOSTAT	20,22
A/D_EXP_3	20,22	GALA_PULS	20,23b	RL	18,19
A/D_EXP_OUT	20,22	IGN_KEY	23a,23b	RL+	19,23b
BLINK_LED	21,22	IGN_KEY_LED	22,23a	RL-	19,23b
CAN_HIGH	21,23b	IGN_KEY_UC	20,23a	ROGER BEEP	18,20
CAN_LOW	21,23b	ILL_IN	20,22	ROT_SW_A	20,22
CASS_L	17,21	INLOCK	16b,20	ROT_SW_B	20,22
CASS_R	17,21	KEYMATRIX_A	20,22	RR	18,19
CD_L	21,23b	KEYMATRIX_B	20,22	RR+	19,23b
CD_MRQ	20,21	KEYMATRIX_C	20,22	RR-	19,23b
CD_R	21,23b	KEYMATRIX_D	20,22	SCL	16b,18,20,21
CODE_ACC	20,23a	KEYMATRIX_E	20,22	SDA	16b,18,20,21
DIAGNOSE	23a,23b	KEYMATRIX_F	20,22	SENSE_ANT	22,23a
DIAGNOSTIC_1	20,23b	KEYMATRIX_G	20,22	SENSE_UB	20,23a
DIAGNOSTIC_2	20,23b	KEYMATRIX_H	20,22	SKIP	17,20
DOLBY_ON/OFF	17,21	LEVEL	16b,20	SOLENOID	17,20
EXT_ILL	22,23b	ME/FE_SW	17,21	STEER_WHEEL	20,23b
EXTNF_L	18,21	MOTOR_ON/OFF	17,20	SWITCH_7V	20,23a
EXTNF_R	18,21	MSS	17,20	TEL_IN	18,23b
FL	18,19	MULTIPATH	16b,22	TEL_MUTE	20,23a
FL+	19,23b	MUTE	19,20	TEL_MUTE_CON	23a,23b
FL-	19,23b	MUTE_SW	17,20	TERM	19,22
FMRQ	20,21,23b	NOISE	16b,20	TIME_OUT	20,23a
FMRQ1	21,23b	ON_OFF	20,23a	TRACK_SW	17,20
FR	18,19	PAUSE	16b,20	TU_L	16b,18
FR+	19,23b	PLAY_SW	17,20,23a	TU_R	16b,18
FR-	19,23b	RCL	16b,20	V_LOW	20,23a
FSCL	20,21,23b	RDA	16b,20	V_REF	16b,20
FSCL1	21,23b	RESET	20,23a	VSC_ON/OFF_SW	20,22,23a

+1	(14V4)	23a,23b
+2	(14V4)	19,22,23a
+2c	(14V4)	23a,23b
+3	(8,5V)	16b,17,18,19,21,23a
+3d	(8,5V)	18,21
+4	(5V)	17,20,21,22,23a,23b
+5	(5V)	16b,17,19,20,21,22,23a,23b
+7	(5V)	20
+10	(14V4)	17,19,23a

TUNER, RDS



TUNER, RDS

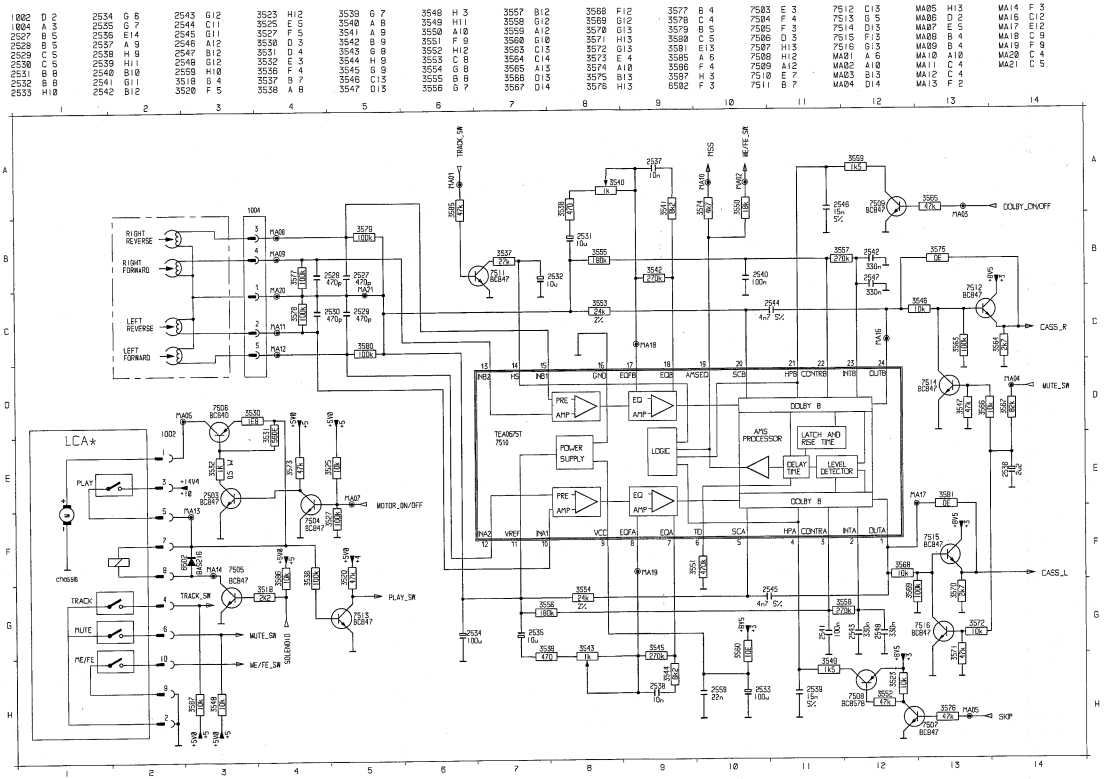


Tuner IC 96
1: 0 V
2: Gnd
3: 0 V
4: 0 V
5: 5,0 V
6: 8,5 V
7: Gnd
8: 5,0 V
9: 5,0 V
10: 3,0 V (FM) / 0 V (AM)
11: 2,0 V - 6,0 V
12: SDA
13: SCL
14: 1,0 V (FM) / 2,7 V (AM)
15: 3,3 V
16: 3,3 V
17: Gnd
18: 0 V
19: 4,7 V (FM) / 3,3 V (AM)

TDA 7330
1: 2,7 V
2: 2,2 V
3: 1,4 V
4: nc
5: Gnd
6: nc
7: nc
8: nc
9: 4,332 MHz
10: 4,332 MHz
11: nc
12: RCL
13: RDA
14: nc
15: nc
16: 5,0 V
17: nc
18: 0 V
19: nc
20: 0 V

LA 2000
1: 2,0 V
2: 7,3 V / 0 V (Pause)
3: 2,0V
4: nc
5: Gnd
6: 5,0 V / 0 V (Pause)
7: nc
8: nc
9: 7,4 V

TAPE DECK, DOLBY



TEA 0675T

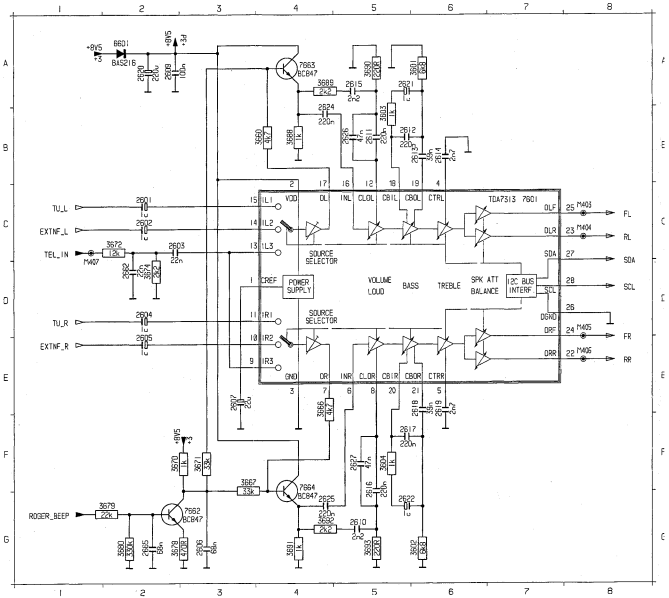
1: 4.0 V
2: 4.0 V
3: 4.0 V
4: 4.0 V
5: 4.0 V
6: 6.3 V (NOR) / 2.6 V (REV)
7: 4.0 V
8: 4.0 V
9: 8.2 V
10: 4.0 V
11: 4.0 V
12: 4.0 V
13: 4.0 V
14: 6.3 V
15: 4.0 V
16: Gnd
17: 4.0 V
18: 4.0 V
19: 4.6 V / 0 V (Pause)
20: 4.0 V
21: 4.0 V (DOLBY On) / 0.5 V (DOLBY Off)
22: 4.0 V
23: 4.0 V
24: 4.0 V

CON 1002 (LCA)

1: 14.0 V / 0 V (Motor Off)
2: Gnd
3: 14.4 V
4: 0 V
5: 14.4 V / 0 V (Eject)
6: 0V / 4.5 V (Mute)
7: 14.4 V / 0 V (Eject)
8: 0.3 V / 14.0 V (MSS)
9: Gnd
10: 0 V (FE) / 5.0 V (ME)

SOFAC

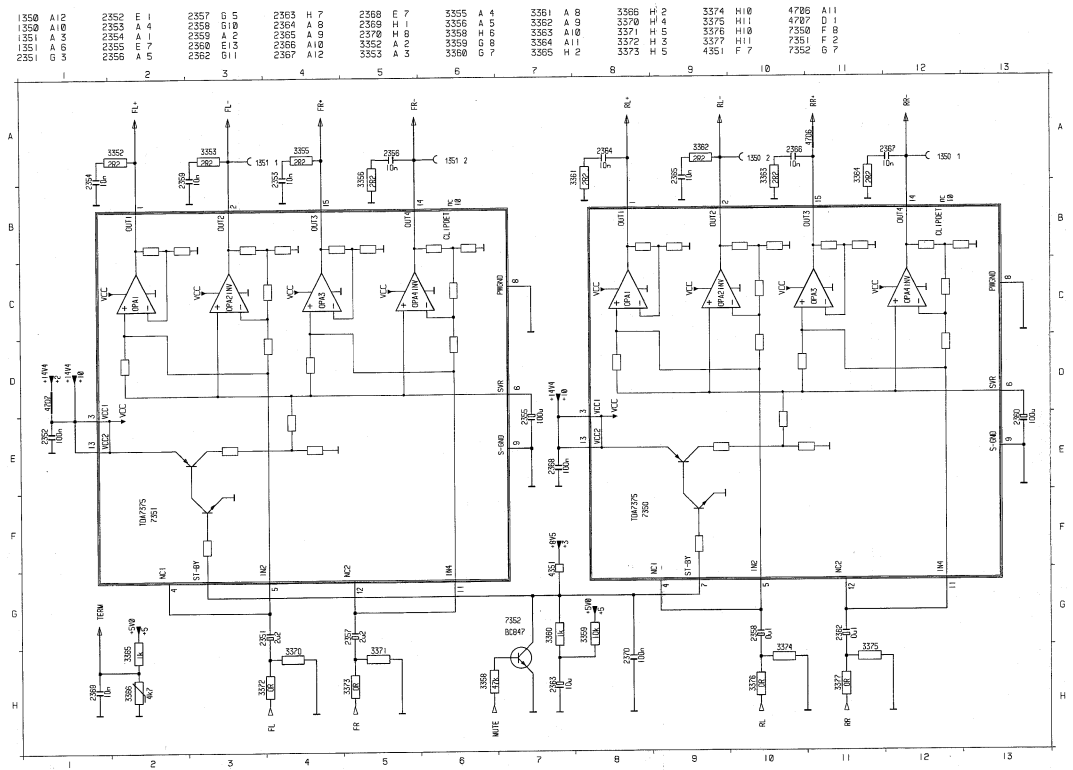
2601	C 2	2611	B 5	2620	A 2	3601	A 6	3672	C 2	3692	G 4	M405	D 8
2602	C 2	2612	B 5	2621	A 5	3602	G 6	3674	D 2	3693	G 5	M406	E 8
2603	C 2	2613	B 6	2622	G 5	3603	B 5	3678	G 2	6601	A 2	M407	D 1
2604	D 2	2614	B 6	2624	B 4	3604	F 5	3679	G 2	7601	C 7		
2605	E 2	2615	A 5	2625	G 4	3608	B 4	3680	G 2	7602	G 3		
2606	G 3	2616	F 5	2626	B 5	3666	E 4	3688	B 4	7663	A 4		
2607	E 3	2617	F 5	2627	F 5	3667	F 3	3689	A 4	7664	F 4		
2609	A 2	2618	E 6	2662	D 2	3670	F 2	3690	A 5	M403	C 8		
2610	G 5	2619	E 6	2665	G 2	3671	F 3	3691	G 4	M404	C 8		



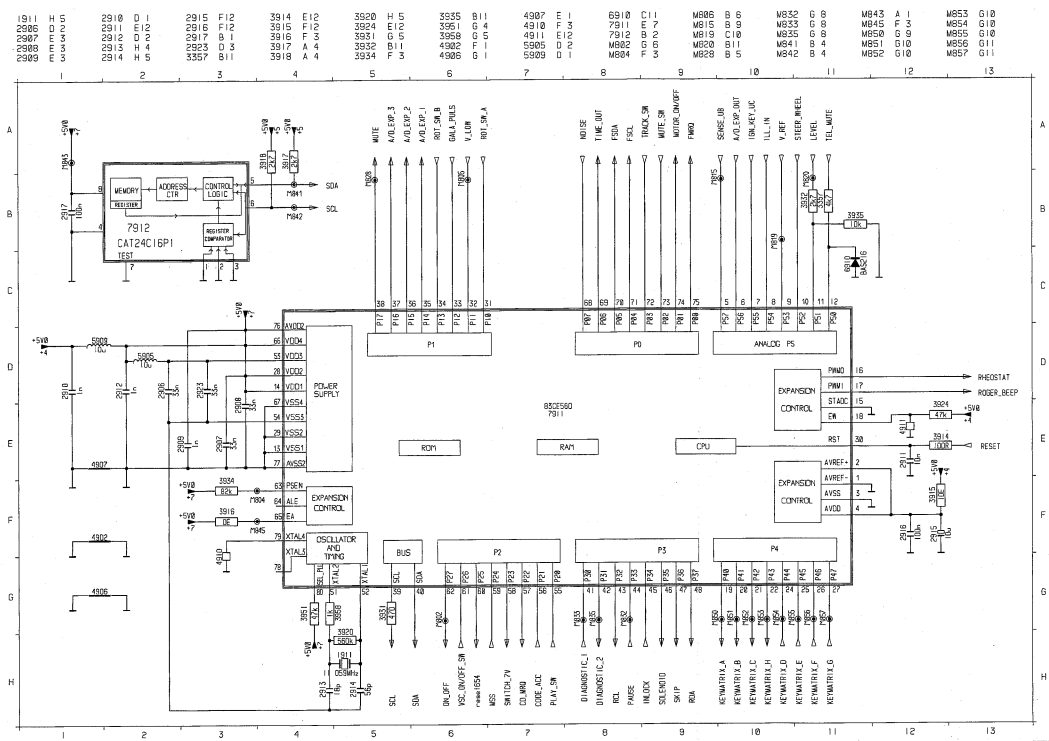
TDA 7313

1. 3,8 V
2. 7,7 V
3. Gnd
4. 3,8 V
5. 3,8 V
6. 3,8 V
7. 3,8 V
8. 3,8 V
9. 3,8 V
10. 3,8 V
11. 3,8 V
12. 3,8 V
13. 3,8 V
14. 3,8 V
15. 3,8 V
16. 3,8 V
17. 3,8 V
18. 3,8 V
19. 3,8 V
20. 3,8 V
21. 3,8 V
22. 3,8 V
23. 3,8 V
24. 3,8 V
25. 3,8 V
26. Gnd
27. SDA
28. SCL

POWER AMPLIFIER



MASTER µ-PROCESSOR



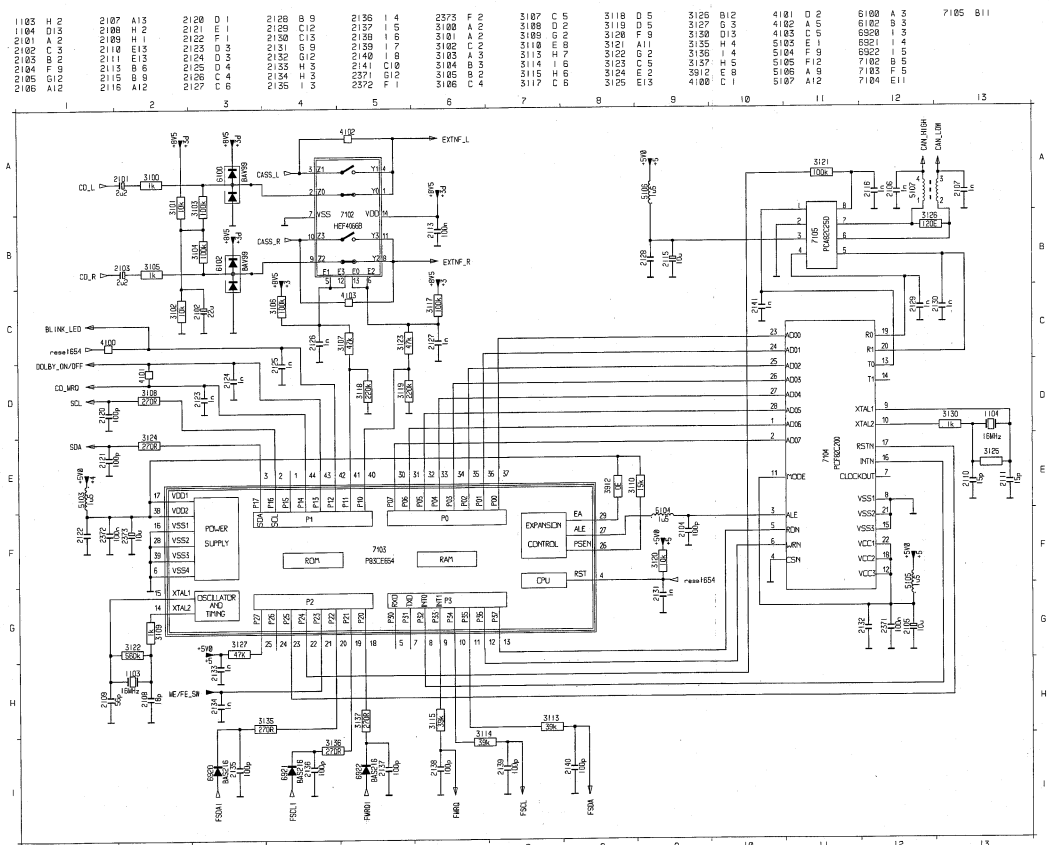
83 CE560

1: Gnd
2: 0,0 V
3: Gnd
4: 5,0 V
5: 3,3 V
6: 2,5 V
7: 3,1 V / 0 V (Ign Off)
8: 4 V
9: 4,2 V
10: 4,7 V
11: 2,6 - 5,0 V
12: 5,0 V (Tel Off)
13: Gnd
14: 5,0 V
15: Gnd
16: 5,0 V
17: 0 V
18: 5,0 V
19: 5,0 V
20: 5,0 V
21: 5,0 V
22: 5,0 V
23: nc
24: 5,0 V
25: 5,0 V
26: 5,0 V
27: 5,0 V
28: 0 V
29: Gnd
30: 0 V / 5,0 V (Reset)
31: 5,0 V / 0 V
32: 5,0 V / 0,3 V (Set Off)
33: 0 V
34: 0 V / 5,0 V
35: Data
36: Data
37: Data
38: 0 V
39: SCL
40: SDA
41: 0 V
42: 0,9 V
43: FCL
44: 5,0 V
45: 5,0 V
46: 0 V
47: 0 V
48: SDA
49: nc
50: nc
51: 11,059 MHz
52: 11,059 MHz
53: 5,0 V
54: Gnd
55: 0 V / 5,0 V (Eject)
56: 5,0 V
57: Data
58: 0 V
59: 5,0 V / 0 V (MSS)
60: 0 V
61: 5,0 V
62: 0 V / 4,3 V (Set Off)
63: 5,0 V
64: nc
65: 5,0 V
66: 5,0 V
67: Gnd
68: 0 V
69: 4,0 V
70: FSDA
71: FSCL
72: 0 V (NOR) / 2,8 V (REV)
73: 0 V / 4,5 V (Cass Mute)
74: 0,7 V / 0 V (Motor On)
75: Data
76: 5,0 V
77: Gnd
78: nc
79: Gnd
80: 5,0 V

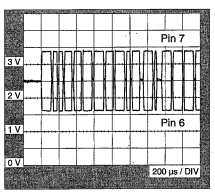
24 C16

1: Gnd
2: Gnd
3: Gnd
4: Gnd
5: SDA
6: SCL
7: Gnd
8: 5,0 V

SLAVE µ-PROCESSOR, CAN-BUS INTERFACE

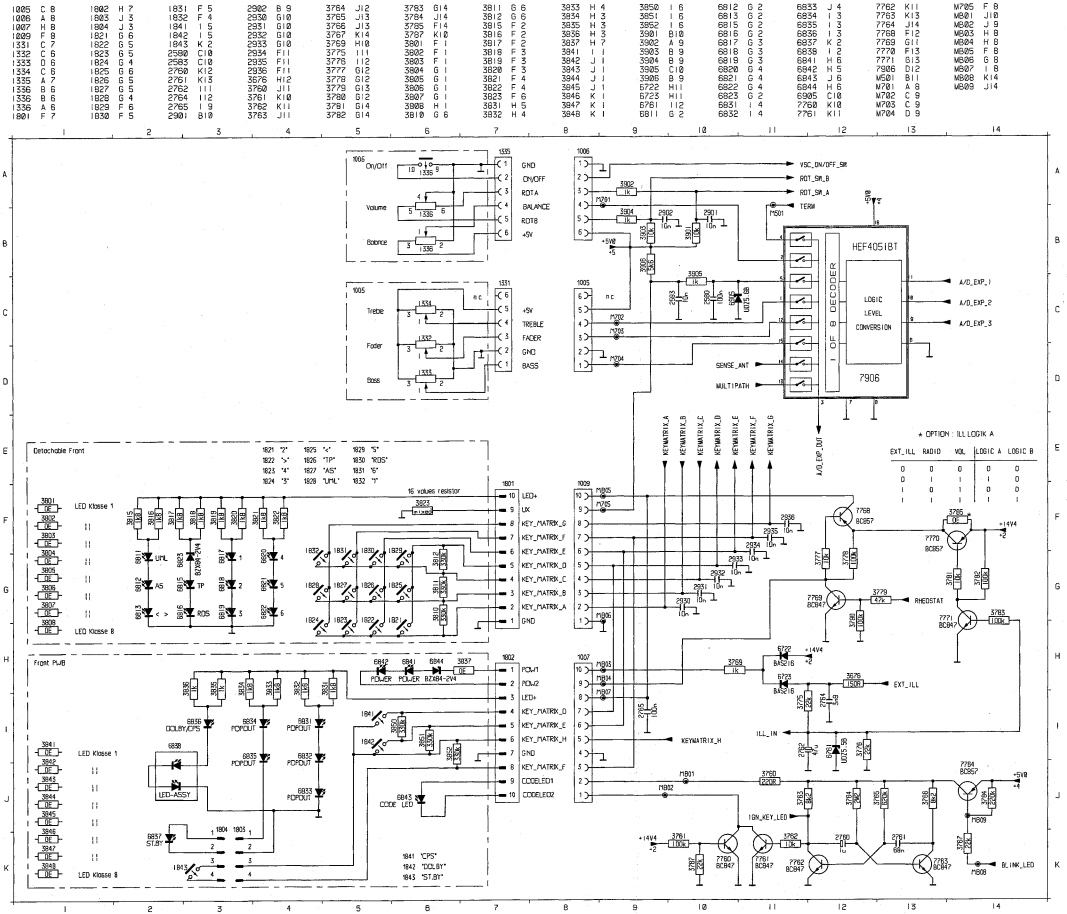


83 CE654	PCF 82C200
1: nc	1: Data
2: SCL	2: Data
3: SDA	3: 1,5 V
4: 0 V / 5,0 V (Reset)	4: Gnd
5: nc	5: Data
6: Gnd	6: Data
7: nc	7: nc
8: Data	8: Gnd
9: Data	9: 16 MHz
10: Data	10: 16 MHz
11: Data	11: 5,0 V
12: Data	12: 5,0 V
13: Data	13: Data
14: 16 MHz	14: nc
15: 16 MHz	15: Gnd
16: Gnd	16: Data
17: 5,0 V	17: 5,0 V
18: 5,0 V	18: 5,0 V
19: 5,0 V	19: 4,2 V
20: 5,0 V	20: 2,5 V
21: 0 V (FE) / 5,0 V (ME)	21: Gnd
22: 0 V	22: 5,0 V
23: 5,0 V	23: Data
24: nc	24: Data
25: 5,0 V	25: Data
26: 5,0 V	26: Data
27: 1,5 V	27: Data
28: Gnd	28: Data
29: 5,0 V	
30: Data	**PCA 82C250**
31: Data	1: Data
32: Data	2: Gnd
33: Data	3: 5,0 V
34: Data	4: Data
35: Data	5: 2,5 V
36: Data	6: 2,5 V
37: Data	7: 2,5 V
38: 5,0 V	8: 2,5 V
39: Gnd	
40: 0 V / 5,0 V	
41: 0 V / 5,0 V	
42: 5,0 V	
43: 4,2 V / 0 V (DD On)	
44: Data	



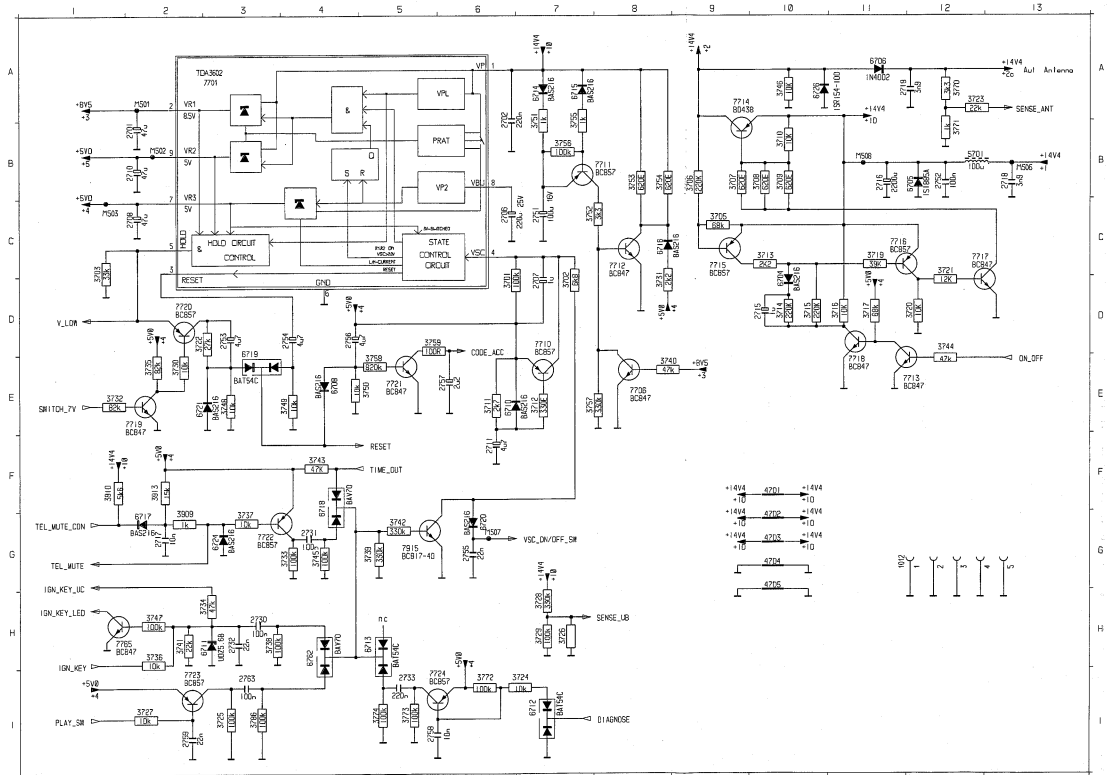
PCA 82C250, Pin 6 / 7: CAN-Bus

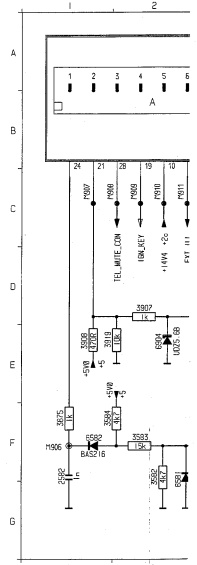
FRONT


HEF4051BT
1 OF 8 DECODER
LOGIC LEVEL CONVERSION
7906
Detachable Front
Front PWB
LED-ASSY
LED Klasse 1
LED Klasse 8
15 volume resistor
VSC_ON/OFF_SW
ROT_SW_B
ROT_SW_A
TERM
SENSE_ANT
MULTIPATH
A/D_EXP_1
A/D_EXP_2
A/D_EXP_3
A/D_EXP_OUT
KEYMATRIX_A
KEYMATRIX_B
KEYMATRIX_C
KEYMATRIX_D
KEYMATRIX_E
KEYMATRIX_F
KEYMATRIX_G
KEYMATRIX_H
ILL_IN
ON_KEY_LED
BLINK_LED
RHEOSTAT
EXT_ILL
* OPTION : ILL LOGIK A
EXT_ILL RADIO VOL LOGIC A LOGIC B
Volume
Balance
Treble
Fader
Bass
GND
ON/OFF
ROT A
BALANCE
ROT B
+5V
TREBLE
FADER
BASS
LED+
UK
KEY_MATRIX_G
KEY_MATRIX_F
KEY_MATRIX_E
KEY_MATRIX_D
KEY_MATRIX_C
KEY_MATRIX_B
KEY_MATRIX_A
POW1
POW2
KEY_MATRIX_D
KEY_MATRIX_E
KEY_MATRIX_H
KEY_MATRIX_F
CODELED1
CODELED2
CODE LED
DOUBLY/CPS
POWOUT
LED-ASSY
1841 "CPS"
1842 "DOUBLY"
1843 "ST.BY"

POWER SUPPLY, ON/OFF LOGIC

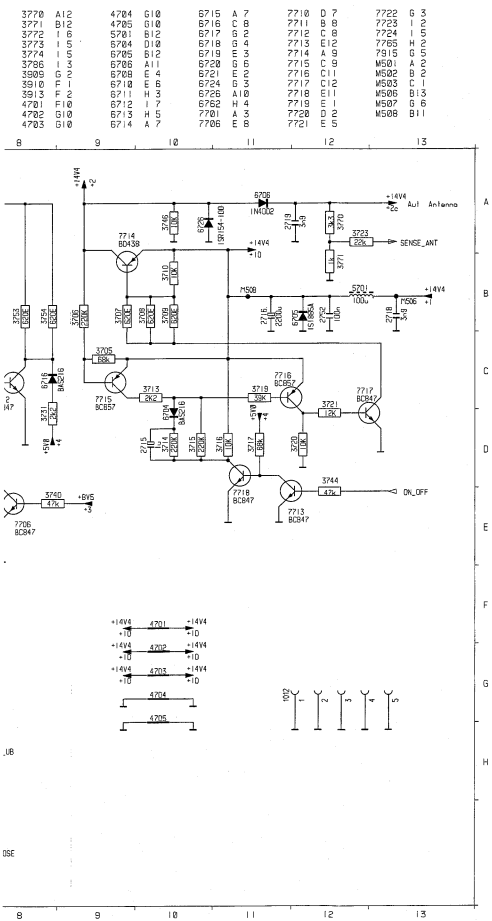
CONNECTOR BLOCK



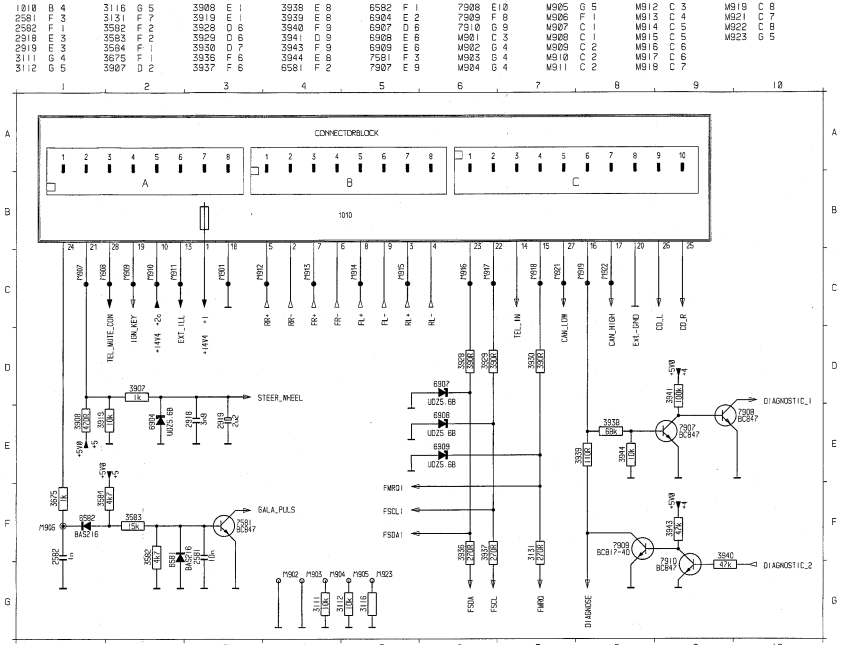


TDA 3602

	Set On	Set Off
1:	14.4 V	14.4 V
2:	8.5 V	0 V
3:	4.9 V	0 V
4:	0.3 V	4.9 V
5:	4.9 V	0.3 V
6:	Gnd	Gnd
7:	5.0 V	5.0 V
8:	14.0 V	14.0 V
9:	5.0 V	0.2 V



CONNECTOR BLOCK



TDA 3602

	Set On	Set Off
1	14.4 V	14.4 V
2	8.5 V	0 V
3	4.9 V	0 V
4	0.3 V	4.9 V
5	4.9 V	0.3 V
6	Gnd	Gnd
7	5.0 V	5.0 V
8	14.0 V	14.0 V
9	5.0 V	0.2 V

Miscellaneous

1001	4822 210 10729	TUNER	TUNER IC 96
1002	4822 265 10808	CONNECTOR	CON BM V 10P M 1.27
1004	4822 267 40818	CONNECTOR	CON BM V 5P F 2.54
1007	4822 265 41215	CONNECTOR	CON BM V 10P F 1.00
1009	4822 265 10599	CONNECTOR	-INNOVAN-
1332	4822 100 11752	RESISTOR, VAR	POT FADER
1333	4822 100 11752	RESISTOR, VAR	POT BASS
1334	4822 100 11752	RESISTOR, VAR	POT TREBLE
1336	4822 100 12255	ENC+20K+SWI	POT VOLUME
1010	4822 265 10814	CONNECTOR	CONN. BLOCK ASSY
1103	4822 242 81961	CRYSTAL	16.0 MHZ
1104	4822 242 81961	CRYSTAL	16.0 MHZ
1402	4822 242 72195	CRYSTAL	4.332 MHz
1911	4822 242 81646	CRYSTAL	11.059 MHZ

Capacitors

2004	5322 122 33538	CERAMIC SMD	150pF 2%NP0 63V
2006	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2007	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2011	5322 122 33538	CERAMIC SMD	150pF 2%NP0 63V
2101	4822 124 23504	ELEC. ALU	2.2µF 20% 50V
2102	4822 124 23279	ELEC. ALU	22µF 20% 16V
2103	4822 124 23504	ELEC. ALU	2.2µF20% 50V
2104	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2105	4822 124 41017	ELEC. ALU	10µF 16V
2108	4822 126 13689	CERAMIC SMD	18pF 1% NP0 63V
2109	4822 126 13693	CERAMIC SMD	56pF 1% NP0 63V
2110	5322 122 33869	CERAMIC SMD	15pF 5%NP0 63V
2111	5322 122 33869	CERAMIC SMD	15pF 5%NP0 63V
2113	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2115	4822 124 41017	ELEC. ALU	10µF 16V
2120	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2121	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2122	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2128	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2135	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2136	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2137	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2138	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2139	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2140	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2351	4822 124 23504	ELEC. ALU	2.2µF 20% 50V
2352	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2355	4822 124 81195	ELEC. ALU	100µF 20% 16V
2357	4822 124 23504	ELEC. ALU	2.2µF 20% 50V
2358	4822 124 23262	ELEC. ALU	0.1µF 50V
2360	4822 124 81195	ELEC. ALU	100µF 20% 16V
2362	4822 124 23262	ELEC. ALU	0.1µF 50V
2363	4822 124 41017	ELEC. ALU	10µF 16V
2368	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2370	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2371	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2372	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2373	4822 124 41017	ELEC. ALU	10µF 16V
2401	4822 124 23504	ELEC. ALU	2.2µF 20% 50V
2402	4822 124 23504	ELEC. ALU	2.2µF 20% 50V
2403	4822 124 41017	ELEC. ALU	10µF 16V
2406	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2408	4822 124 22646	ELEC. ALU	47µF 20% 16V
2409	4822 124 23504	ELEC. ALU	2.2µF 20% 50V
2410	5322 122 32452	CERAMIC SMD	47pF 5%NP0 63V
2411	5322 122 31946	CERAMIC SMD	27pF 5%NP0 63V
2412	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2413	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2414	4822 124 23504	ELEC. ALU	2.2µF 20% 50V
2415	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2420	5322 122 33538	CERAMIC SMD	150pF 2%NP0 63V
2421	5322 122 33538	CERAMIC SMD	150pF 2%NP0 63V
2423	5322 122 33538	CERAMIC SMD	150pF 2%NP0 63V
2424	5322 122 33538	CERAMIC SMD	150pF 2%NP0 63V
2425	5322 122 32448	CERAMIC SMD	10pF 5% 50V
2427	4822 122 33575	CERAMIC SMD	220pF 5%NPO 50V
2430	4822 124 80765	ELEC. ALU	4.7µF 20% 35V
2431	4822 124 41017	ELEC. ALU	10µF 16V
2432	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2437	5322 122 32448	CERAMIC SMD	10pF 5% 50V
2438	5322 122 32448	CERAMIC SMD	10pF 5% 50V
2527	5322 122 32268	CERAMIC SMD	470pF 10% 50V
2528	5322 122 32268	CERAMIC SMD	470pF 10% 50V
2529	5322 122 32268	CERAMIC SMD	470pF 10% 50V
2530	5322 122 32268	CERAMIC SMD	470pF 10% 50V
2531	4822 124 41017	ELEC. ALU	10µF 16V
2532	4822 124 41017	ELEC. ALU	10µF 16V
2533	4822 124 80453	ELEC. ALU	100µF 20% 10V
2534	4822 124 80453	ELEC. ALU	100µF 20% 10V
2535	4822 124 41017	ELEC. ALU	10µF 16V
2536	4822 124 23504	ELEC. ALU	2.2µF 20% 50V
2539	4822 126 13188	CERAMIC SMD	15nF 5% X7R 63V
2540	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2541	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2546	4822 126 13188	CERAMIC SMD	15nF 5% X7R 63V
2580	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2601	4822 124 23282	ELEC. ALU	1µF 20% 50V
2602	4822 124 23282	ELEC. ALU	1µF 20% 50V
2604	4822 124 23282	ELEC. ALU	1µF 20% 50V
2605	4822 124 23282	ELEC. ALU	1µF 20% 50V
2606	4822 126 13851	CERAMIC SMD	68nF 10% 16V
2607	4822 124 23279	ELEC. ALU	22µF 20% 16V
2609	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2611	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2612	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2613	4822 126 13852	CERAMIC SMD	39nF 10% 25V
2616	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2617	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2618	4822 126 13852	CERAMIC SMD	39nF 10% 25V
2620	4822 124 23582	ELEC. ALU	220µF 10V
2621	4822 124 23282	ELEC. ALU	1µF 20% 50V
2622	4822 124 23282	ELEC. ALU	1µF 20% 50V
2624	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2625	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2626	4822 124 11884	ELEC. ALU	47nF 10% 0805 X7R
2627	4822 124 11884	ELEC. ALU	47nF 10% 0805 X7R
2665	4822 126 13851	CERAMIC SMD	68nF 10% 16V
2701	4822 124 80724	ELEC. ALU	47µF 20% 10V
2702	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2706	4822 124 41097	ELEC. ALU	220µF 20% 16V
2707	4822 124 23282	ELEC. ALU	1µF 20% 50V
2708	4822 124 80724	ELEC. ALU	47µF 20% 10V
2710	4822 124 22646	ELEC. ALU	47µF 20% 16V
2711	4822 124 80727	ELEC. ALU	4.7µF 20% 25V
2715	4822 124 23282	ELEC. ALU	1µF 20% 50V
2716	4822 124 80769	ELEC. ALU	2200µF 20% 16V
2730	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2731	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2733	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2751	4822 124 81195	ELEC. ALU	100µF 20% 16V
2752	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2753	4822 124 80727	ELEC. ALU	4.7µF 20% 25V
2754	4822 124 80727	ELEC. ALU	4.7µF 20% 25V
2756	4822 124 80765	ELEC. ALU	4.7µF 20% 35V
2757	4822 124 23504	ELEC. ALU	2.2µF 20% 50V
2760	4822 124 23282	ELEC. ALU	1µF 20% 50V
2761	4822 126 13851	CERAMIC SMD	68nF 10% 16V
2762	4822 124 22646	ELEC. ALU	47µF 20% 16V
2763	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2765	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2906	4822 122 33342	CERAMIC SMD	33nF10%X7R 63V
2907	4822 122 33342	CERAMIC SMD	33nF10%X7R 63V
2908	4822 122 33342	CERAMIC SMD	33nF10%X7R 63V
2913	4822 126 13689	CERAMIC SMD	18pF 1% NP0 63V
2914	4822 126 13693	CERAMIC SMD	56pF 1% NP0 63V
2915	4822 124 41017	ELEC. ALU	10µF 16V
2916	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2917	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2919	4822 124 23504	ELEC. ALU	2.2µF20% 50V
2923	4822 122 33342	CERAMIC SMD	33nF10%X7R 63V

Resistors

3366	4822 116 30426		4k7 3% 0.1W
3426	4822 100 12071	VARIAB.	EVNDXAA03B25
3518	4822 117 11449	CARBON	2k2 1% 0,1W
3540	4822 100 11681	VARIAB.	1k 30% 0,1W
3543	4822 100 11681	VARIAB.	1k 30% 0,1W
3672	4822 117 11383		12k 1% 0,1W
3674	4822 117 11449	CARBON	2k2 1% 0,1W
3678	4822 116 83868		150Ω 5% 0,5W
3689	4822 117 11449	CARBON	2k2 1% 0,1W
3692	4822 117 11449	CARBON	2k2 1% 0,1W
3713	4822 117 11449	CARBON	2k2 1% 0,1W
3721	4822 117 11383		12k 1% 0,1W
3731	4822 117 11449	CARBON	2k2 1% 0,1W
3939	4822 116 52177		110Ω 5% 0,5W

Coils

5000	4822 157 71267		BLM32A06PT
5001	4822 157 71267		BLM32A06PT
5002	4822 157 71267		BLM32A06PT
5003	4822 157 71267		BLM32A06PT
5004	4822 157 71267		BLM32A06PT
5103	4822 157 71267		BLM32A06PT
5104	4822 157 71267		BLM32A06PT
5105	4822 157 71267		BLM32A06PT
5106	4822 157 71267		BLM32A06PT
5107	4822 157 11121		EMI 50V/2A ZJY
5401	4822 158 21719		1µ5H
5701	4822 157 70935		100µH 10A
5905	4822 152 20677		10µH
5909	4822 152 20677		10µH

Diodes

6100	5322 130 34337		BAV99
6102	5322 130 34337		BAV99
6420	5322 130 34337		BAV99
6430	5322 130 34337		BAV99
6502	4822 130 83757		BAS216
6581	4822 130 83757		BAS216
6582	4822 130 83757		BAS216
6601	4822 130 83757		BAS216
6704	4822 130 83757		BAS216
6705	4822 130 80751		1S1885A
6706	4822 130 81196	POWER RECT.	S5566B
6708	4822 130 83757		BAS216
6710	4822 130 83757		BAS216
6711	4822 130 10185	REFERENCE	UDZ
6712	4822 130 82594		BAT54C
6713	4822 130 82594		BAT54C
6714	4822 130 83757		BAS216
6715	4822 130 83757		BAS216
6716	4822 130 83757		BAS216
6717	4822 130 83757		BAS216
6718	5322 130 34331		BAV70
6719	4822 130 82594		BAT54C
6720	4822 130 83757		BAS216
6721	4822 130 83757		BAS216
6722	4822 130 83757		BAS216
6723	4822 130 83757		BAS216
6724	4822 130 83757		BAS216
6726	4822 130 10655	POWER RECT.	1SR154-400
6761	4822 130 10185	REFERENCE	UDZ
6762	5322 130 34331		BAV70
6904	4822 130 10185	REFERENCE	UDZ
6905	4822 130 10185	REFERENCE	UDZ
6907	4822 130 10185	REFERENCE	UDZ
6908	4822 130 10185	REFERENCE	UDZ
6909	4822 130 10185	REFERENCE	UDZ
6920	4822 130 83757		BAS216
6921	4822 130 83757		BAS216
6922	4822 130 83757		BAS216

Transistors and IC's

7102	5322 209 14542	IC DIG MOS	HEF4066BT
7103	4822 209 15194	µ-COMP	S87C654-5B44 + SW 22DC397 D40
7104	4822 209 15195	IC DIG MOS	PCF82C200T
7105	4822 209 15196	IC DIG MOS	PCA82C250
7350	4822 209 33629	IC ANA	TDA7375
7351	4822 209 33629	IC ANA	TDA7375
7352	4822 130 60511	TRANS., <1W	BC847B
7401	4822 209 83159	IC ANA	LA2000
7403	4822 209 90304	IC ANA	TDA7330BD
7420	4822 209 32742	IC ANA AMPL.	TL074IN
7503	4822 130 60511	TRANS., <1W	BC847B
7504	4822 130 60511	TRANS., <1W	BC847B
7505	4822 130 60511	TRANS., <1W	BC847B
7506	4822 130 41078	TRANS., <1W	BC640
7507	4822 130 60511	TRANS., <1W	BC847B
7508	5322 130 60508	TRANS., <1W	BC857B
7509	4822 130 60511	TRANS., <1W	BC847B
7510	4822 209 32744	IC ANA	TEA0675T/V1
7511	4822 130 60511	TRANS., <1W	BC847B
7512	4822 130 60511	TRANS., <1W	BC847B
7513	4822 130 60511	TRANS., <1W	BC847B
7514	4822 130 60511	TRANS., <1W	BC847B
7515	4822 130 60511	TRANS., <1W	BC847B
7516	4822 130 60511	TRANS., <1W	BC847B
7581	4822 130 60511	TRANS., <1W	BC847B
7601	4822 209 32995	IC ANA	TDA7313
7662	4822 130 60511	TRANS., <1W	BC847B
7663	4822 130 60511	TRANS., <1W	BC847B
7664	4822 130 60511	TRANS., <1W	BC847B
7701	4822 209 33029	IC ANA	TDA3602
7706	4822 130 60511	TRANS., <1W	BC847B
7710	5322 130 60508	TRANS., <1W	BC857B
7711	5322 130 60508	TRANS., <1W	BC857B
7712	4822 130 60511	TRANS., <1W	BC847B
7713	4822 130 60511	TRANS., <1W	BC847B
7714	4822 130 40995	TRANS., >=1W	BD438
7715	5322 130 60508	TRANS., <1W	BC857B
7716	5322 130 60508	TRANS., <1W	BC857B
7717	4822 130 60511	TRANS., <1W	BC847B
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7719	4822 130 60511	TRANS., <1W	BC847B
7720	5322 130 60508	TRANS., <1W	BC857B
7721	4822 130 60511	TRANS., <1W	BC847B
7722	5322 130 60508	TRANS., <1W	BC857B
7723	5322 130 60508	TRANS., <1W	BC857B
7724	5322 130 60508	TRANS., <1W	BC857B
7760	4822 130 60511	TRANS., <1W	BC847B
7761	4822 130 60511	TRANS., <1W	BC847B
7762	4822 130 60511	TRANS., <1W	BC847B
7763	4822 130 60511	TRANS., <1W	BC847B
7764	5322 130 60508	TRANS., <1W	BC857B
7765	4822 130 60511	TRANS., <1W	BC847B
7768	5322 130 60508	TRANS., <1W	BC857B
7769	4822 130 60511	TRANS., <1W	BC847B
7906	5322 209 11446	IC DIG MOS	HEF4051BT
7907	4822 130 60511	TRANS., <1W	BC847B
7908	4822 130 60511	TRANS., <1W	BC847B
7909	4822 130 42615	TRANS., <1W	BC817-40
7910	4822 130 60511	TRANS., <1W	BC847B
7911	4822 209 15197	µ-COMP	P87CE560EFB/00 + SW 22DC397 D40
7912	5322 209 12323	EEPROM	CAT24C16PI
7915	4822 130 42615	TRANS., <1W	BC817-40

F 16V				
nF 10% 16V				
F 5% 50V				
F 5% 50V				
pF 10% 50V				
pF 10% 50V				
pF 10% 50V				
pF 10% 50V				
F 16V				
F 16V				
µF 20% 10V				
µF 20% 10V				
F 16V				
µF 20% 50V				
F 5% X7R 63V				
nF 10% 16V				
nF 10% 16V				
F 5% X7R 63V				
nF 10% 16V				
20% 50V				
20% 50V				
20% 50V				
20% 50V				
F 10% 16V				
F 20% 16V				
nF 10% 16V				
nF 10% 16V				
nF 10% 16V				
F 10% 25V				
µF 10V				
20% 50V				
20% 50V				
nF 10% 16V				
nF 10% 16V				
F 10% 0805 X7R				
F 10% 0805 X7R				
F 10% 16V				
F 20% 10V				
nF 10% 16V				
µF 20% 16V				
20% 50V				
F 20% 10V				
F 20% 16V				
µF 20% 25V				
20% 50V				
0µF 20% 16V				
nF 10% 16V				
nF 10% 16V				
nF 10% 16V				
µF 20% 16V				
nF 10% 16V				
µF 20% 25V				
µF 20% 25V				
µF 20% 35V				
µF 20% 50V				
20% 50V				
µF 10% 16V				
µF 20% 16V				
nF 10% 16V				
nF 10% 16V				
µF10%X7R 63V				
µF10%X7R 63V				
µF10%X7R 63V				
µF 1% NP0 63V				
µF 1% NP0 63V				
µF 16V				
nF 10% 16V				
nF 10% 16V				
µF20% 50V				
µF10%X7R 63V				

Resistors				
3366	4822 116 30426			4k7 3% 0,1W
3426	4822 100 12071	VARIAB.		EVNDXAA03B25
3518	4822 117 11449	CARBON		2k2 1% 0,1W
3540	4822 100 11681	VARIAB.		1k 30% 0,1W
3543	4822 100 11681	VARIAB.		1k 30% 0,1W
3672	4822 117 11383			12k 1% 0,1W
3674	4822 117 11449	CARBON		2k2 1% 0,1W
3676	4822 116 83868			150Ω 5% 0,5W
3689	4822 117 11449	CARBON		2k2 1% 0,1W
3692	4822 117 11449	CARBON		2k2 1% 0,1W
3713	4822 117 11449	CARBON		2k2 1% 0,1W
3721	4822 117 11383			12k 1% 0,1W
3731	4822 117 11449	CARBON		2k2 1% 0,1W
3939	4822 116 52177			110Ω 5% 0,5W
Coils				
5000	4822 157 71267			BLM32A06PT
5001	4822 157 71267			BLM32A06PT
5002	4822 157 71267			BLM32A06PT
5003	4822 157 71267			BLM32A06PT
5004	4822 157 71267			BLM32A06PT
5103	4822 157 71267			BLM32A06PT
5104	4822 157 71267			BLM32A06PT
5105	4822 157 71267			BLM32A06PT
5106	4822 157 71267			BLM32A06PT
5107	4822 157 11121			EMI 50V/2A ZJY
5401	4822 156 21719			1µ5H
5701	4822 157 70935			100µH 10A
5905	4822 152 20677			10µH
5909	4822 152 20677			10µH
Diodes				
6100	5322 130 34337			BAV99
6102	5322 130 34337			BAV99
6420	5322 130 34337			BAV99
6430	5322 130 34337			BAV99
6502	4822 130 83757			BAS216
6581	4822 130 83757			BAS216
6582	4822 130 83757			BAS216
6601	4822 130 83757			BAS216
6704	4822 130 83757			BAS216
6705	4822 130 80751			1S1885A
6706	4822 130 81196	POWER RECT.		S5566B
6708	4822 130 83757			BAS216
6710	4822 130 83757			BAS216
6711	4822 130 10185	REFERENCE		UDZ
6712	4822 130 82594			BAT54C
6713	4822 130 82594			BAT54C
6714	4822 130 83757			BAS216
6715	4822 130 83757			BAS216
6716	4822 130 83757			BAS216
6717	4822 130 83757			BAS216
6718	5322 130 34331			BAV70
6719	4822 130 82594			BAT54C
6720	4822 130 83757			BAS216
6721	4822 130 83757			BAS216
6722	4822 130 83757			BAS216
6723	4822 130 83757			BAS216
6724	4822 130 83757			BAS216
6726	4822 130 10655	POWER RECT.		1SR154-400
6761	4822 130 10185	REFERENCE		UDZ
6762	5322 130 34331			BAV70
6904	4822 130 10185	REFERENCE		UDZ
6905	4822 130 10185	REFERENCE		UDZ
6907	4822 130 10185	REFERENCE		UDZ
6908	4822 130 10185	REFERENCE		UDZ
6909	4822 130 10185	REFERENCE		UDZ
6920	4822 130 83757			BAS216
6921	4822 130 83757			BAS216
6922	4822 130 83757			BAS216
Transistors and IC's				
7102	5322 209 14542	IC DIG MOS		HEF4066BT
7103	4822 209 15194	µ-COMP		S87C654-5B44 + SW 22DC397 D40
7104	4822 209 15195	IC DIG MOS		PCF82C200T
7105	4822 209 15196	IC DIG MOS		PCA82C250
7350	4822 209 33629	IC ANA		TDA7375
7351	4822 209 33629	IC ANA		TDA7375
7352	4822 130 60511	TRANS., <1W		BC847B
7401	4822 209 83159	IC ANA		LA2000
7403	4822 209 90304	IC ANA		TDA7330BD
7420	4822 209 32742	IC ANA AMPL.		TL074IN
7503	4822 130 60511	TRANS., <1W		BC847B
7504	4822 130 60511	TRANS., <1W		BC847B
7505	4822 130 60511	TRANS., <1W		BC847B
7506	4822 130 41078	TRANS., <1W		BC640
7507	4822 130 60511	TRANS., <1W		BC847B
7508	5322 130 60508	TRANS., <1W		BC857B
7509	4822 130 60511	TRANS., <1W		BC847B
7510	4822 209 32744	IC ANA		TEA0675T/V1
7511	4822 130 60511	TRANS., <1W		BC847B
7512	4822 130 60511	TRANS., <1W		BC847B
7513	4822 130 60511	TRANS., <1W		BC847B
7514	4822 130 60511	TRANS., <1W		BC847B
7515	4822 130 60511	TRANS., <1W		BC847B
7516	4822 130 60511	TRANS., <1W		BC847B
7581	4822 130 60511	TRANS., <1W		BC847B
7601	4822 209 32995	IC ANA		TDA7313
7662	4822 130 60511	TRANS., <1W		BC847B
7663	4822 130 60511	TRANS., <1W		BC847B
7664	4822 130 60511	TRANS., <1W		BC847B
7701	4822 209 33029	IC ANA		TDA3602
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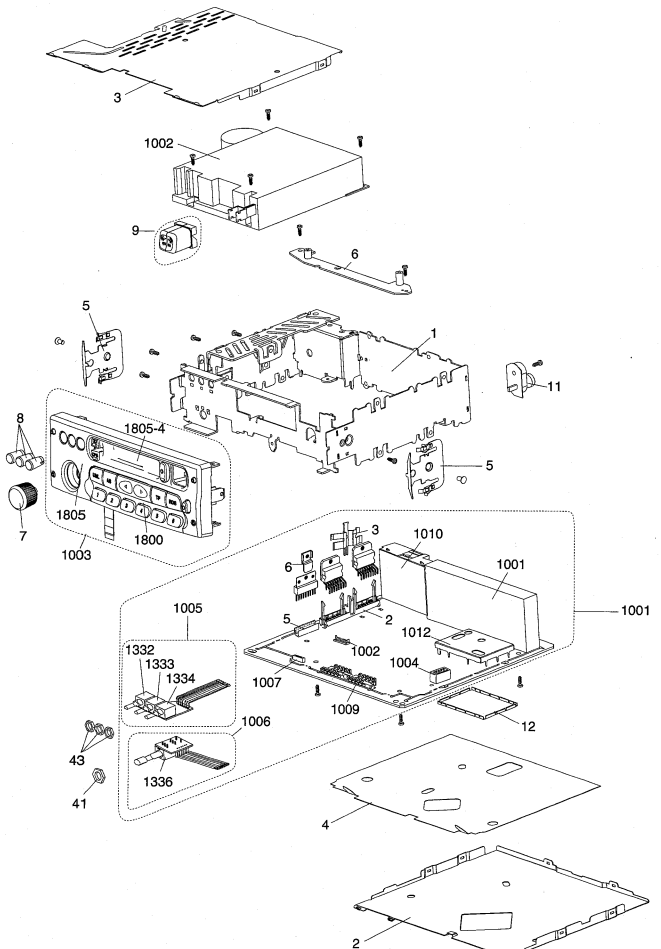
7716	5322 130 60508	TRANS., <1W		BC857B
7717	4822 130 60511	TRANS., <1W		BC847B
7718	4822 130 60511	TRANS., <1W		BC847B
7719	4822 130 60511	TRANS., <1W		BC847B
7720	5322 130 60508	TRANS., <1W		BC857B
7721	4822 130 60511	TRANS., <1W		BC847B
7722	5322 130 60508	TRANS., <1W		BC857B
7723	5322 130 60508	TRANS., <1W		BC857B
7724	5322 130 60508	TRANS., <1W		BC857B
7760	4822 130 60511	TRANS., <1W		BC847B
7761	4822 130 60511	TRANS., <1W		BC847B
7762	4822 130 60511	TRANS., <1W		BC847B
7763	4822 130 60511	TRANS., <1W		BC847B
7764	5322 130 60508	TRANS., <1W		BC857B
7765	4822 130 60511	TRANS., <1W		BC847B
7768	5322 130 60508	TRANS., <1W		BC857B
7769	4822 130 60511	TRANS., <1W		BC847B
7906	5322 209 11446	IC DIG MOS		HEF4051BT
7907	4822 130 60511	TRANS., <1W		BC847B
7908	4822 130 60511	TRANS., <1W		BC847B
7909	4822 130 42615	TRANS., <1W		BC817-40
7910	4822 130 60511	TRANS., <1W		BC847B
7911	4822 209 15197	µ-COMP		P87CE560EFB/00 + SW 22DC397 D40
7912	5322 209 12323	EEPROM		CAT24C16PI
7915	4822 130 42615	TRANS., <1W		BC817-40

Mechanical Parts List

5	MOUNTING SPRING	4822 492 71046
7	KNOB VOLUME	4822 413 31857
8	KNOB FADER, BASS, TREBLE	4822 413 31664
9	KNOB ASSY FOR CASSETTE	4822 410 63788
11	CONNECTOR AERIAL	4822 267 31697
1001-1001	TUNER IC96	4822 210 10729
1001-1002	CON BM V 10P M 1.27 90715 B	4822 265 10808
1001-1004	CON BM V 5P F 2.54 90720 B	4822 267 40818
1001-1005-1332	POT FADER	4822 100 11752
1001-1005-1333	POT BASS	4823 100 11752
1001-1005-1334	POT TREBLE	4824 100 11752
1001-1006-1336	POT VOLUME	4822 100 12255
1001-1007	CON BM V 10P F 1.00 FFC 0.3 B	4822 265 41215
1001-1009	CONNECTOR SPRING -INNOVAN-	4822 265 10599
1001-1010	CONNECTOR BLOCK ASSY	4822 265 10814
1002	TAPE DECK LCA*1-4/1	4822 691 10556
1003-1800	DETACHABLE UNIT	4822 459 50945
1003-1805	ORNAMENTAL PLATE ASSY	4822 459 04416
1003-1805-4	CASSETTE FLAP	4822 443 10496
1003-1805-17	SPRING CASSETTE FLAP	4822 492 42533

EXPLODED VIEW



Cassette Car Radio 22 DC 397/75H

Service
Service
Service

Supplement

Use this supplement together with Service Manual 22DC397/75 (4822 725 23533)
For repair information of the tape deck see Service Manual LCA*1–4/1 (4822 725 23538)

Service Manual

12 V

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GENERAL INFORMATION

The 22DC397/75H is the HOLDEN derivate of the 22DC397/75.
The main difference is, that the 22DC397/75H has no RDS function. For that reason also the detachable front has been modified. The UML, TP and RDS keys were replaced by the LOC, AM and FM keys.
The tuner module differs in FM bandwidth (230kHz) and dynamic behaviour.
The layout of the main PWB is the same.

WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD).
Careless handling during repair may reduce life time of these components drastically.

ATTENTION
Static Sensitive Devices
Handle Only at Static
Safe Work Stations.

When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

Appropriate ESD equipment can be ordered under followings service codes:

Anti-static table mat	large	1200 x 650 x 1,25 mm	4822 466 10953
	small	600 x 650 x 1,25 mm	4822 466 10958
Connection box (1 MΩ)			4822 320 11307
Complete kit ESD3			4822 310 10671
Wristband tester			4822 344 13999

NOTE

For EEPROM programming purposes a Gateway Interface will be available very soon at the Service Centre Eindhoven. More information regarding this item will be published separately.

If you have any problems concerning Security Code, EEPROM programming or defective EEPROMs in the meantime, please forward the set to:

Car Systems Wetzlar
Service (SP-RC)
Philipsstraße 1
35 576 Wetzlar
Germany

EEPROM PARAMETER SETTINGS

Due to the absence of the RDS feature, parameters 10 to 33 of the 22DC397/75 have been deleted.
In addition to the hardware SDR, which is implemented in the IC96 14SV module, the set is equipped with a software SDR control. Two new parameters were created for it, as described below.

No	Function	Range	Grid	def. Value	def. Param.	Eeprom Address
60	SDR time window	0 .. 10s	00H .. 32H	6,4s	20H	32H
61	SDR hysteresis	0 .. 100%	00H .. 0FH		05H	33H
	SDR decision levels FM					
	number of decision levels		00H .. 0FH		06H	20FH
	level 1		00H .. FFH		FFH	210H
	level 2		00H .. FFH		FFH	211H
	level 3		00H .. FFH		BFH	212H
	level 4		00H .. FFH		A6H	213H
	level 5		00H .. FFH		8DH	214H
	level 6		00H .. FFH		7AH	215H
	level 7 .. 15		00H .. FFH		not used	216H .. 21EH
	SDR decision levels AM					
	number of decision levels		00H .. 0FH		08H	21FH
	level 1		00H .. FFH		D5H	220H
	level 2		00H .. FFH		CFH	221H
	level 3		00H .. FFH		BDH	222H
	level 4		00H .. FFH		ADH	223H
	level 5		00H .. FFH		99H	224H
	level 6		00H .. FFH		8DH	225H
	level 7		00H .. FFH		70H	226H
	level 8		00H .. FFH		1AH	227H
	level 9 .. 15		00H .. FFH		not used	228H .. 22EH

SDR Time Window

This parameter describes the length of the time window, during that the fieldstrength is averaged. The time window is set to n * 200ms where n is the programmed value. A value of 00hex will completely switch off SDR.

SDR Decision Levels FM and AM

These classes both consist of 16 bytes (32 in total). The first byte (byte 0) holds the number of decision levels. The following 15 bytes (bytes 1 to 15) hold the decision levels themselves in descending order (from higher to lower levels).
After calculating the averaged level, the value is compared to the array of decision levels. As soon as the averaged value is lower than or equal to the next decision level in the array the treble cut is increased by 2dB. This means that you have 6 decision levels for a maximum cut of 12dB in FM and 8 decision levels for a maximum cut of 16dB in AM.

Note: Setting decision levels 1 and 2 to FFhex provides a static treble cut of 4 dB in FM.

SDR Hysteresis

This parameter helps to avoid nervous switching of the treble cut.

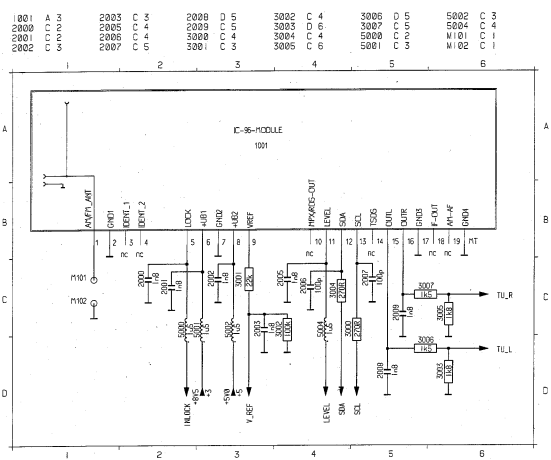
Example: Precondition is a level of A9hex and a treble cut of 6dB. Parameter 61 is 05hex.
If the fourth decision level is A6hex and the signal drops below this, this will result in a treble cut of 8dB.
Now the signal level has at least to rise above A6hex + 5hex = ABhex to get back to a level cut of 6dB.

TEST MODE

Start the test mode by keeping the FM key depressed for 5 sec while the set is switched ON, independent of the actual source, however the diagnostics must not be active.
The hardware and software identification number will be displayed for 1 sec, after that the tuner parameters will be evaluated acc. to the table below.

Display	Description	Range
HHHHSSSS	HHHH = hardware number SSSS = software number	
AT__FFF.F	A = field strength T = SDR treble cut FFF.F = frequency	6 - F (F = good) 0 - F (1 step = 2dB) kHz / MHz

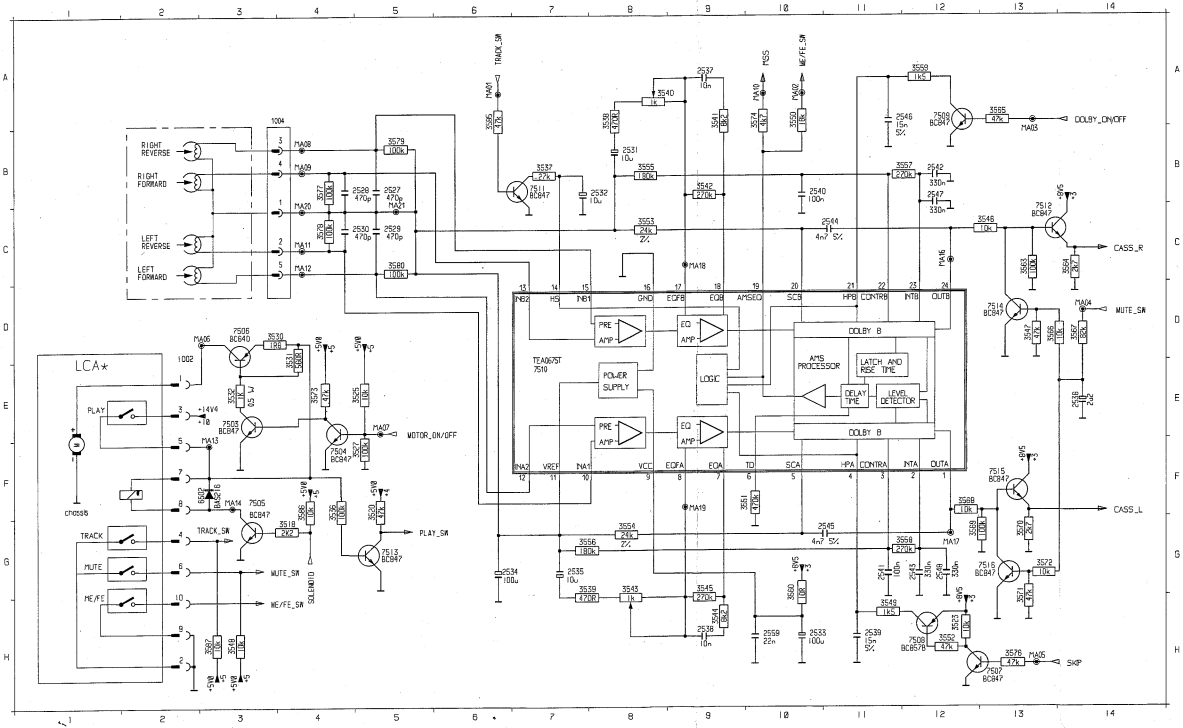
TUNER



TAPE DECK, DOLBY

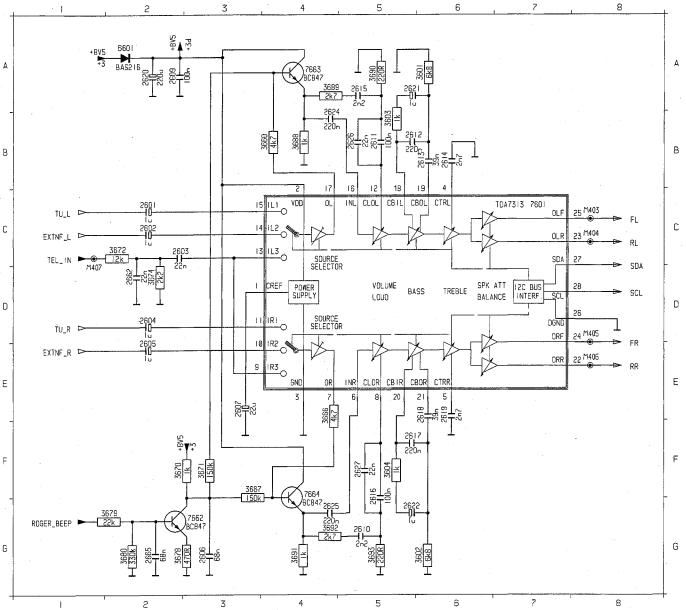
1002	D 2	2534	G 6	2543	G12	3523	H12	3539	G 7	3548	H 3	3557	B12	3568	F12	3578	C 4	7505	F 3
1004	A 3	2535	G 7	2544	C11	3525	E 5	3540	A 8	3549	H11	3558	G12	3569	G12	3579	B 5	7506	D 3
2527	B 5	2536	E14	2545	G11	3527	F 5	3541	A 9	3550	A10	3559	A12	3570	G13	3580	C 5	7507	H13
2528	B 5	2537	A 9	2546	A12	3530	D 3	3542	B 9	3551	F10	3560	G10	3571	H13	3585	A 6	7508	H12
2529	C 5	2538	H 9	2547	B12	3531	D 4	3543	G 8	3552	H12	3563	C13	3572	G13	3586	F 4	7509	A12
2530	C 5	2539	H11	2548	G12	3532	E 3	3544	H 9	3553	C 8	3564	C14	3573	E 4	3587	H 3	7510	E 7
2531	B 8	2540	B10	2559	H10	3536	F 4	3545	G 9	3554	G 8	3565	A13	3574	A10	6502	F 3	7511	B 7
2532	B 8	2541	G11	3518	G 4	3537	B 7	3546	C13	3555	B 9	3566	D13	3575	H13	7503	C 3	7512	C13
2533	H10	2542	B12	3520	F 5	3538	A 8	3547	D13	3556	G 7	3567	D14	3577	B 4	7504	F 4	7513	G 5

7514	D13	MA07	E 5	MA17	G12
7515	F13	MA08	B 4	MA18	C 9
7516	G13	MA09	B 4	MA19	F 9
MA01	A 6	MA10	A10	MA20	C 4
MA02	A10	MA11	C 4	MA21	C 5
MA03	B13	MA12	C 4		
MA04	D14	MA13	F 3		
MA05	H13	MA14	F 3		
MA06	D 2	MA16	C12		

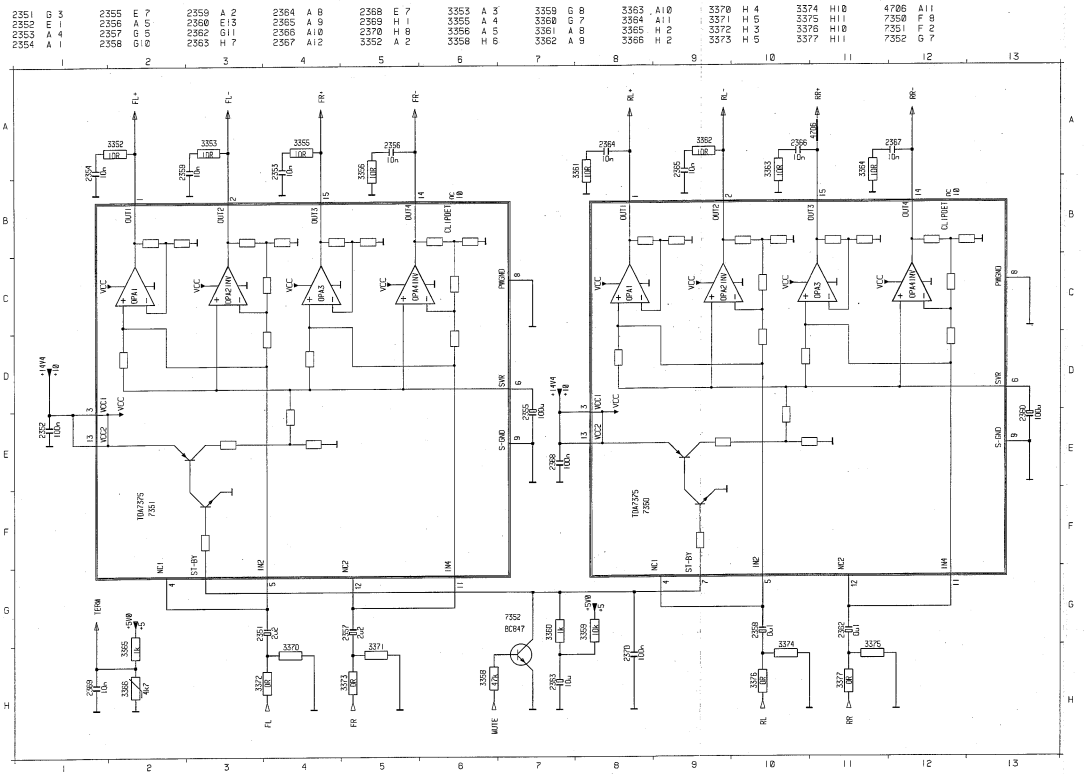


SOFAC

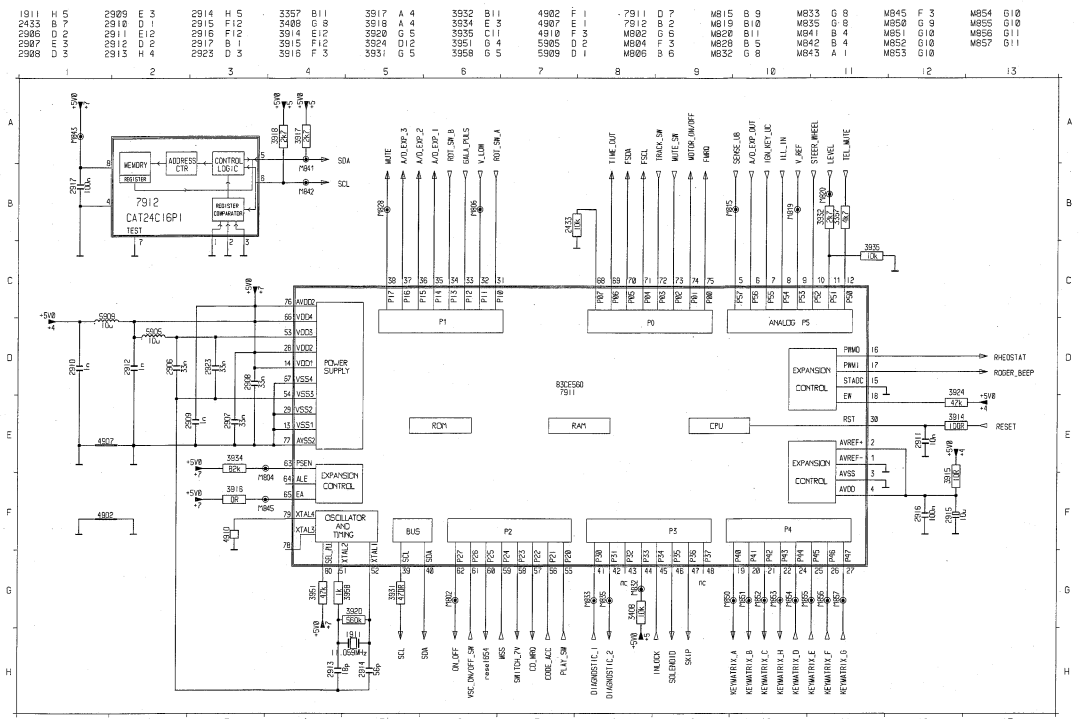
2601	C 2	2611	B 5	2620	A 2	3601	A 6	3672	C 2	3692	G 4	M405	D 8
2602	C 2	2612	B 5	2621	A 5	3602	G 6	3674	D 2	3693	G 5	M406	E 8
2603	C 2	2613	B 6	2622	G 5	3603	B 5	3678	G 2	6601	A 2	M407	D 1
2604	D 2	2614	B 6	2624	B 4	3604	F 5	3679	G 2	7601	C 7		
2605	E 2	2615	A 6	2625	G 4	3660	B 4	3680	G 2	7662	G 3		
2606	G 3	2616	F 5	2626	B 5	3666	E 4	3688	B 4	7663	A 4		
2607	E 3	2617	F 5	2627	F 5	3667	F 3	3689	A 4	7664	F 4		
2609	A 2	2618	E 6	2662	D 2	3670	F 2	3690	A 5	M403	C 8		
2610	G 5	2619	E 6	2665	G 2	3671	F 3	3691	G 4	M404	C 8		



POWER AMPLIFIER

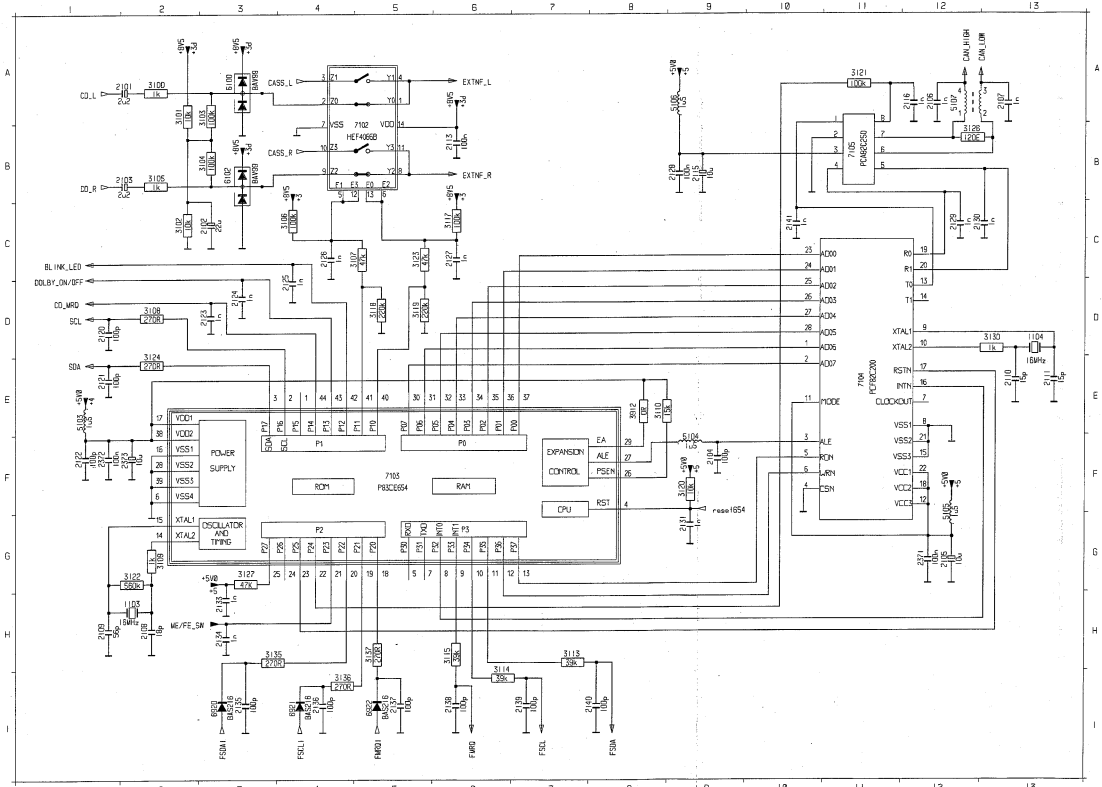


MASTER µ-PROCESSOR

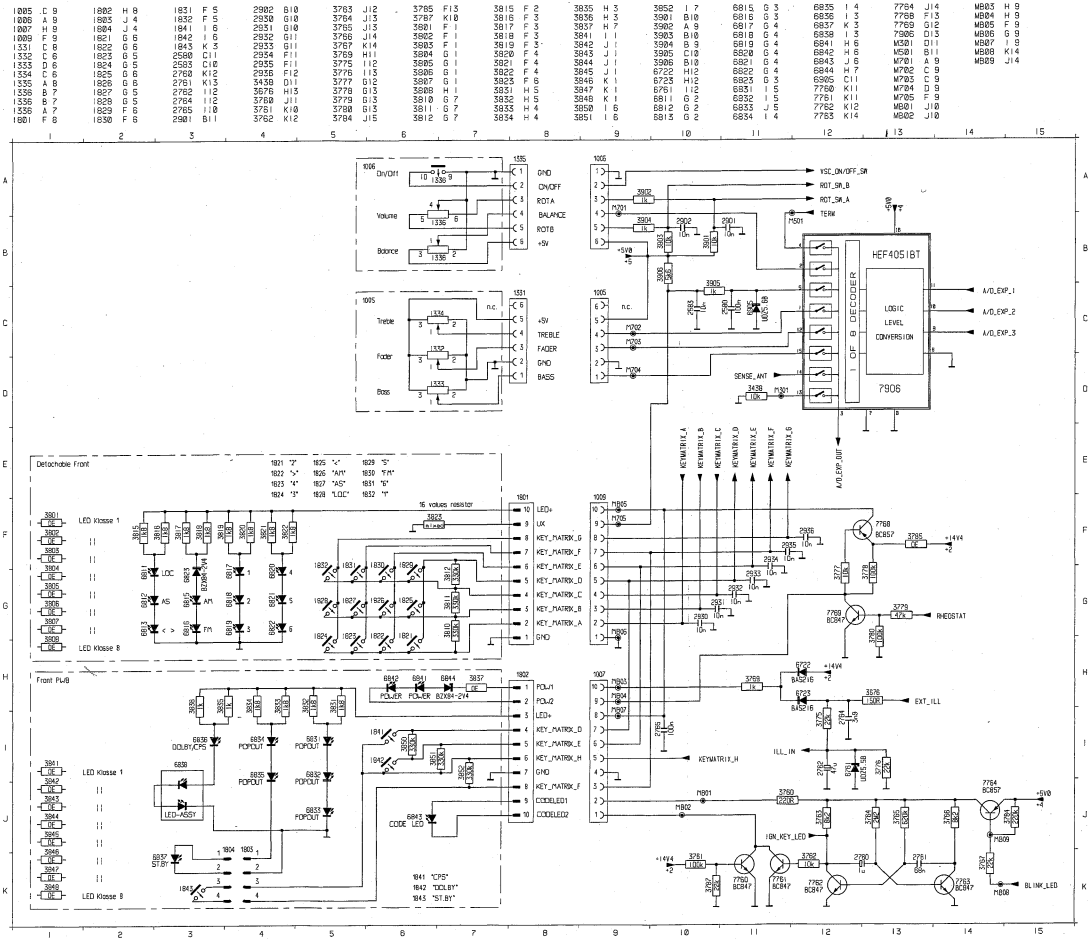


SLAVE µ-PROCESSOR, CAN-BUS INTERFACE

1103	H 2	2106	A12	2115	B 9	2125	D 4	2133	H 3	2140	I 8	3102	C 2	3109	G 2	3119	D 5	3127	G 3	5104	F 9	6921	I 4
1104	D13	2107	A13	2116	A12	2126	C 4	2134	H 4	2141	C10	3103	A 3	3110	E 8	3120	F 9	3130	D13	5105	F12	6922	I 5
2101	A 2	2108	H 2	2120	D 1	2127	C 6	2135	I 3	2371	G12	3104	B 3	3113	H 7	3121	A11	3135	H 3	5106	A 9	7102	B 4
2102	C 3	2109	H 1	2121	E 1	2128	B 9	2136	I 4	2372	F 1	3105	B 2	3114	I 6	3122	G 2	3136	I 4	5107	A12	7103	F 5
2103	B 2	2110	E13	2122	F 1	2129	C12	2137	I 5	2373	F 2	3106	C 4	3115	H 6	3123	C 5	3137	H 5	6100	A 3	7104	E11
2104	F 3	2111	E13	2123	D 3	2130	C12	2138	I 6	3100	A 2	3107	C 5	3117	C 6	3124	E 2	3912	E 8	6102	B 3	7105	B11
2105	G12	2113	B 6	2124	D 3	2131	G 9	2139	I 7	3101	A 2	3108	D 2	3118	D 5	3126	B12	5103	E 1	6920	I 3		



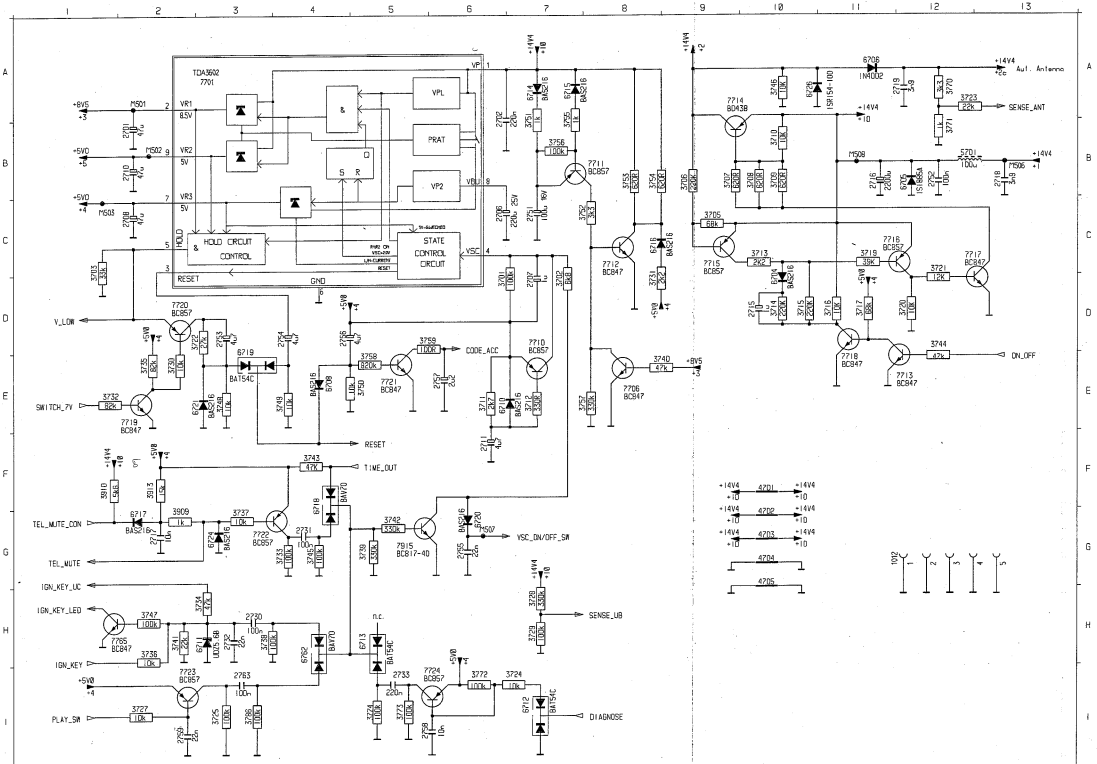
FRONT, FRONT CONNECTION



POWER SUPPLY, ON/OFF LOGIC

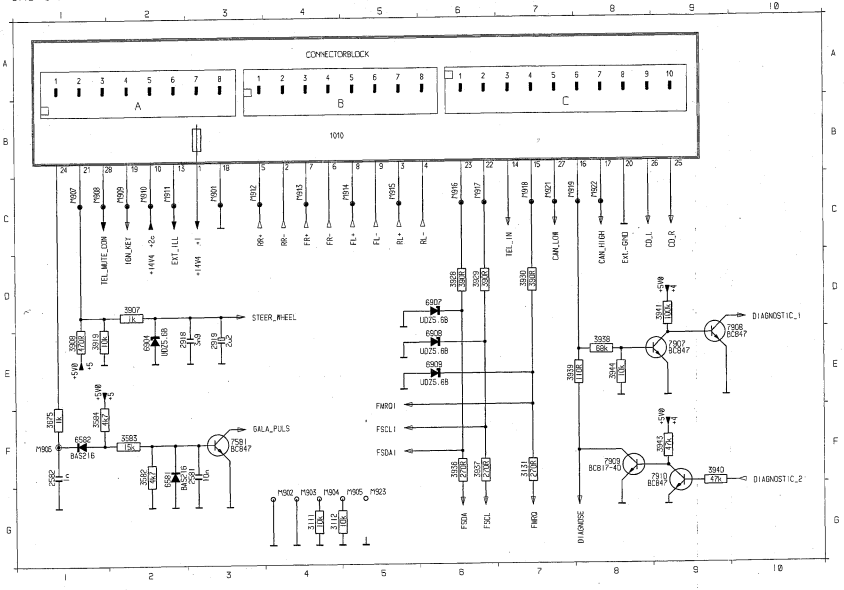
1012	G12	2719	A12	2758	I 5	3711	E 6	3724	I 7	3737	G 3	3749	E 4	3771	B12	4705	G10	6716	C 8
2701	B 2	2730	H 3	2759	I 2	3712	E 7	3725	I 3	3738	H 3	3750	E 5	3772	I 6	5701	B12	6717	G 2
2702	A 6	2731	G 4	2763	I 3	3713	C10	3727	I 2	3739	G 5	3751	A 7	3773	I 5	6704	D10	6718	G 4
2706	C 6	2732	H 3	3701	D 6	3714	D10	3728	H 7	3740	E 9	3752	C 8	3774	I 5	6705	B12	6719	E 3
2707	D 7	2733	I 5	3702	D 7	3715	D10	3729	H 7	3741	H 2	3753	B 8	3786	I 3	6706	A11	6720	G 6
2708	C 2	2751	C 7	3703	C 1	3716	D11	3730	E 2	3742	G 5	3754	B 9	3909	G 2	6708	E 4	6721	E 3
2710	B 2	2752	B12	3705	C 9	3717	D11	3731	D 8	3743	F 4	3755	A 7	3910	F 1	6710	E 6	6724	G 3
2711	F 6	2753	D 3	3706	B 9	3719	C11	3732	E 1	3744	D12	3756	B 7	3913	F 2	6711	H 3	6726	A10
2715	D10	2754	D 4	3707	B 9	3720	D12	3733	G 4	3745	G 4	3757	E 8	4701	F10	6712	I 7	6762	H 4
2716	B11	2755	G 6	3708	B10	3721	D12	3734	H 3	3746	A10	3758	E 5	4702	G10	6713	H 5	7701	A 3
2717	G 2	2756	D 4	3709	B10	3722	D 3	3735	E 2	3747	H 2	3759	D 5	4703	G10	6714	A 7	7706	E 8
2718	B13	2757	E 6	3710	B10	3723	A12	3736	H 2	3748	E 3	3770	A12	4704	G10	6715	A 7	7710	D 7

7711	B 8	7723	I 2		
7712	C 8	7724	I 5		
7713	E12	7765	H 2		
7714	A 9	7915	G 5		
7715	C 9	W501	A 2		
7716	C11	W502	B 2		
7717	C12	W503	C 1		
7718	E11	W506	B13		
7719	E 2	W507	G 6		
7720	D 2	W508	B11		
7721	E 5				



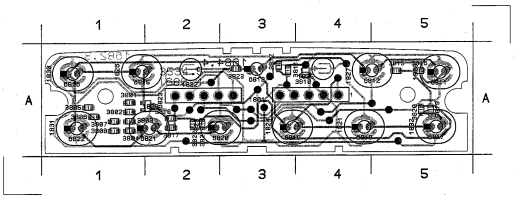
CONNECTOR BLOCK

1010	B 4	3131	F 7	3919	E 1	3939	E 7	6904	E 2	7909	F 8	M906	F 1	M913	C 4	M921	C 7
2581	F 3	3582	F 2	3928	D 6	3940	F 9	6907	D 6	7910	F 9	M907	C 1	M914	C 5	M922	C 8
2582	F 1	3583	F 2	3929	D 6	3941	D 9	6908	E 6	M901	C 3	M908	C 1	M915	C 5	M923	G 5
2918	E 2	3584	F 1	3930	D 7	3943	F 9	6909	E 6	M902	G 4	M909	C 2	M916	C 6		
2919	E 3	3675	F 1	3936	F 6	3944	E 8	7581	F 3	M903	G 4	M910	C 2	M917	C 6		
3111	G 4	3907	D 2	3937	F 6	6581	F 2	7907	E 9	M904	G 4	M911	C 2	M918	C 7		
3112	G 4	3908	E 1	3938	E 8	6582	F 1	7908	E 9	M905	G 5	M912	C 3	M919	C 7		

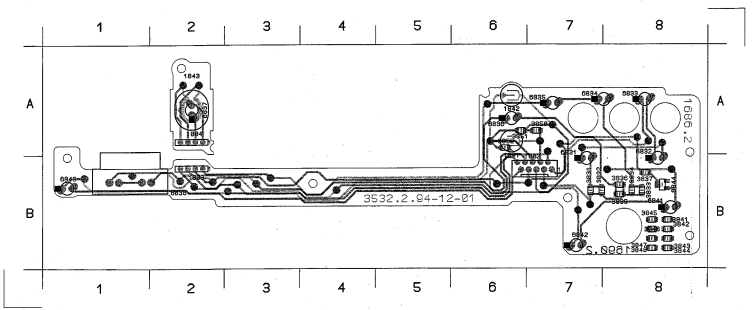


LAYOUT DETACHABLE FRONT, FRONT PWB

1801 A 3	1827 A 5	3802 A 1	3810 A 4	3819 A 5	6813 A 3	6821 A 2
1821 A 4	1828 A 5	3803 A 1	3811 A 3	3820 A 5	6815 A 1	6822 A 1
1822 A 2	1829 A 2	3804 A 1	3812 A 3	3821 A 2	6816 A 1	6823 A 2
1823 A 3	1830 A 1	3805 A 1	3815 A 5	3822 A 2	6817 A 5	
1824 A 3	1831 A 1	3806 A 1	3816 A 5	3823 A 3	6818 A 4	
1825 A 4	1832 A 5	3807 A 1	3817 A 2	6811 A 5	6819 A 3	
1826 A 1	3801 A 1	3808 A 1	3818 A 2	6812 A 5	6820 A 3	



1802 B 7	1842 A 6	3833 B 8	3837 B 8	3844 B 8	3848 B 8	6831 B 7	6835 A 7	6841 B 8
1803 B 2	1843 A 2	3834 B 8	3841 B 8	3845 B 8	3850 A 7	6832 B 8	6836 A 6	6842 B 7
1804 A 2	3831 B 7	3835 B 8	3842 B 8	3846 B 8	3851 A 6	6833 A 8	6837 A 2	6843 B 1
1841 A 6	3832 B 7	3836 B 8	3843 B 8	3847 B 8	3852 A 6	6834 A 8	6838 B 1	6844 B 8



INTE

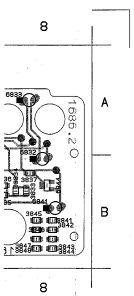
Termi

A/D_E
A/D_E
A/D_E
A/D_E
BLINK
CAN_I
CAN_I
CASS_
CASS_
CD_L
CD_M
CD_R
CODE
DIAGN
DIAGN
DIAGN
DOLB'
EXT_II
EXTNF
EXTNF
FL
FL+
FL-
FMRQ
FMRQ
FR
FR+
FR-
FSCL

Power

+1 (
+2 (
+2c (
+3 (
+3d (
+4 (
+5 (
+7 (
+10 (

1 B 8
2 B 7
3 B 1
4 B 8



INTERCONNECTION TABLE

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CASS_R	5, 9
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DIAGNOSTIC_1	8, 12
DIAGNOSTIC_2	8, 12
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EXTNF_L	6, 9
EXTNF_R	6, 9
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FR+	7, 12
FR-	7, 12
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FSDA	8, 9, 12
FSDA1	9, 12
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IGN_KEY_LED	10, 11
IGN_KEY_UC	8, 11
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KEYMATRIX_C	8, 10
KEYMATRIX_D	8, 10
KEYMATRIX_E	8, 10
KEYMATRIX_F	8, 10
KEYMATRIX_G	8, 10
KEYMATRIX_H	8, 10
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RL-	7, 12
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ROT_SW_B	8, 10
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RR+	7, 12
RR-	7, 12
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SENSE_UB	8, 11
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TU_R	4, 6
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+3d	(8,5V)	6, 9
+4	(5V)	5, 8, 9, 10, 11, 12
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+7	(5V)	8
+10	(14V4)	5, 7, 11

ELECTRICAL PARTS LIST

Pos.	Service Code	Description	
Miscellaneous			
1001	4822 210 10752	TUNER	TUNER IC96 14SV PACKED
1002	4822 265 10808	CONNECTOR	CON BM V 10P M 1.27 90715 B
1004	4822 267 40818	CONNECTOR	CON BM V 5P F 2.54 90720 B
1007	4822 265 10908	CONNECTOR	CON BM V 10P F 1.00 FFC 0.3 B
1009	4822 265 10599	CONNECTOR	CONNECTOR -INNOVAN-
1010	4822 265 10814	CONNECTOR	CONN. BLOCK ASSY
1103	4822 242 81961	CRYSTAL	16.0 MHz
1104	4822 242 81961	CRYSTAL	16.0 MHz
1332	4822 100 11752	RESISTOR, VAR	POT FADER
1333	4822 100 11752	RESISTOR, VAR	POT BASS
1334	4822 100 11752	RESISTOR, VAR	POT TREBLE
1336	4822 100 12255	RESISTOR, VAR	POT VOLUME
1911	4822 242 81646	CRYSTAL	11.059 MHz
Capacitors			
2001	4822 122 31767	CERAMIC SMD	150pF 2%NP0 63V
2002	4822 122 31767	CERAMIC SMD	150pF 2%NP0 63V
2004	4822 122 31767	CERAMIC SMD	150pF 2%NP0 63V
2005	4822 122 31767	CERAMIC SMD	150pF 2%NP0 63V
2006	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2007	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2021	4822 122 31767	CERAMIC SMD	150pF 2%NP0 63V
2022	4822 122 31767	CERAMIC SMD	150pF 2%NP0 63V
2101	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V
2102	4822 124 23279	ELECTROLYTIC ALU.	22µF 20% 16V
2103	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V
2104	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2105	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V
2108	4822 126 13689	CERAMIC SMD	18pF 1% NP0 63V
2109	4822 126 13693	CERAMIC SMD	56pF 1% NP0 63V
2110	5322 122 33869	CERAMIC SMD	15pF 5%NP0 63V
2111	5322 122 33869	CERAMIC SMD	15pF 5%NP0 63V
2113	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2115	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V
2120	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2121	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2122	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2128	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2135	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2136	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2137	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2138	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2139	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2140	5322 122 32531	CERAMIC SMD	100pF 5%NP0 50V
2351	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V
2352	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2355	4822 124 81195	ELECTROLYTIC ALU.	100µF 20% 16V
2357	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V
2358	4822 124 23262	ELECTROLYTIC ALU.	0.1µF 50V
2360	4822 124 81195	ELECTROLYTIC ALU.	100µF 20% 16V
2362	4822 124 23262	ELECTROLYTIC ALU.	0.1µF 50V
2363	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V
2368	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2370	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2371	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2372	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2373	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V
2527	5322 122 32268	CERAMIC SMD	470pF 10% 50V
2528	5322 122 32268	CERAMIC SMD	470pF 10% 50V
2529	5322 122 32268	CERAMIC SMD	470pF 10% 50V
2530	5322 122 32268	CERAMIC SMD	470pF 10% 50V
2531	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V
2532	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V
2533	4822 124 80453	ELECTROLYTIC ALU.	100µF 20% 10V
2534	4822 124 80453	ELECTROLYTIC ALU.	100µF 20% 10V
2535	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V
2536	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V
2539	4822 126 13188	CERAMIC SMD	15nF 5% X7R 63V
2540	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2541	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2546	4822 126 13188	CERAMIC SMD	15nF 5% X7R 63V
2580	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2601	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V
2602	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V
2604	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V
2605	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V
2606	4822 126 13851	CERAMIC SMD	68nF 10% 16V
2607	4822 124 23279	ELECTROLYTIC ALU.	22µF 20% 16V
2609	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2611	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2612	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2613	4822 126 13852	CERAMIC SMD	39nF 10% 25V
2616	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2617	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2618	4822 126 13852	CERAMIC SMD	39nF 10% 25V
2620	4822 124 23582	ELECTROLYTIC ALU.	220µF 10V
2621	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V
2622	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V
2624	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2625	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2626	5322 122 32654	CERAMIC SMD	22nF 10%X7R 63V
2627	5322 122 32654	CERAMIC SMD	22nF 10%X7R 63V
2665	4822 126 13851	CERAMIC SMD	68nF 10% 16V
2701	4822 124 80724	ELECTROLYTIC ALU.	47µF 20% 10V
2702	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2706	4822 124 41097	ELECTROLYTIC ALU.	220µF 20% 16V
2707	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V
2708	4822 124 80724	ELECTROLYTIC ALU.	47µF 20% 10V
2710	4822 124 22646	ELECTROLYTIC ALU.	47µF 20% 16V
2711	4822 124 80727	ELECTROLYTIC ALU.	4.7µF 20% 25V
2715	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V
2716	4822 124 80769	ELECTROLYTIC ALU.	2200µF 20% 16V
2730	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2731	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2733	4822 126 13849	CERAMIC SMD	220nF 10% 16V
2751	4822 124 81195	ELECTROLYTIC ALU.	100µF 20% 16V
2752	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2753	4822 124 80727	ELECTROLYTIC ALU.	4.7µF 20% 25V
2754	4822 124 80727	ELECTROLYTIC ALU.	4.7µF 20% 25V
2756	4822 124 80765	ELECTROLYTIC ALU.	4.7µF 20% 35V
2757	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V
2760	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V
2761	4822 126 13851	CERAMIC SMD	68nF 10% 16V
2762	4822 124 22646	ELECTROLYTIC ALU.	47µF 20% 16V
2763	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2765	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2906	4822 122 33342	CERAMIC SMD	33nF 10%X7R 63V
2907	4822 122 33342	CERAMIC SMD	33nF 10%X7R 63V
2908	4822 122 33342	CERAMIC SMD	33nF 10%X7R 63V
2913	4822 126 13689	CERAMIC SMD	18pF 1% NP0 63V
2914	4822 126 13693	CERAMIC SMD	56pF 1% NP0 63V
2915	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V
2916	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2917	4822 126 13848	CERAMIC SMD	100nF 10% 16V
2919	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V
2923	4822 122 33342	CERAMIC SMD	33nF 10%X7R 63V
Resistors			
3366	4822 116 30426		4k7 3% 0,1W
3518	4822 117 11449		2k2 1% 0,1W
3540	4822 100 11681	RESISTOR, VAR	1k 30% 0,1W
3543	4822 100 11681	RESISTOR, VAR	1k 30% 0,1W
3672	4822 117 11383		12k 1% 0,1W
3674	4822 117 11449		2k2 1% 0,1W
3676	4822 116 83868		150R 5% 0,5W
3713	4822 117 11449		2k2 1% 0,1W
3721	4822 117 11383		12k 1% 0,1W
3731	4822 117 11449		2k2 1% 0,1W
3939	4822 116 52177		110R 5% 0,5W
Coils			
5000	4822 157 71267		BLM31BG01SPT
5001	4822 157 71267		BLM31BG01SPT
5002	4822 157 71267		BLM31BG01SPT
5004	4822 157 71267		BLM31BG01SPT
5103	4822 157 71267		BLM31BG01SPT
5104	4822 157 71267		BLM31BG01SPT
5105	4822 157 71267		BLM31BG01SPT
5106	4822 157 71267		BLM31BG01SPT
5107	4822 157 11121		EMI 50V/2A ZJY
5701	4822 157 70935		
5905	4822 152 20677		10µH
5909	4822 152 20677		10µH
Diodes			
6100	5322 130 34337		BAV99
6102	5322 130 34337		BAV99
6502	4822 130 83757		BAS216
6581	4822 130 83757		BAS216
6582	4822 130 83757		BAS216
6601	4822 130 83757		BAS216
6704	4822 130 83757		BAS216
6705	4822 130 80751	POWER RECTIFIER	1S1885A
6706	4822 130 81196	POWER RECTIFIER	S5566B
6708	4822 130 83757		BAS216
6710	4822 130 83757		BAS216
6711	4822 130 10185	REFERENCE	UDZ
6712	4822 130 82594		BAT54C
6713	4822 130 82594		BAT54C
6714	4822 130 83757		BAS216
6715	4822 130 83757		BAS216
6716	4822 130 83757		BAS216
6717	4822 130 83757		BAS216
6718	5322 130 34331		BAV70
6719	4822 130 82594		BAT54C
6720	4822 130 83757		BAS216
6721	4822 130 83757		BAS216
6722	4822 130 83757		BAS216
6723	4822 130 83757		BAS216
6724	4822 130 83757		BAS216
6726	4822 130 10655	POWER RECTIFIER	1SR154-400
6761	4822 130 10185	REFERENCE	UDZ
6762	5322 130 34331		BAV70
6904	4822 130 10185	REFERENCE	UDZ
6905	4822 130 10185	REFERENCE	UDZ
6907	4822 130 10185	REFERENCE	UDZ
6908	4822 130 10185	REFERENCE	UDZ
6909	4822 130 10185	REFERENCE	UDZ
6920	4822 130 83757		BAS216
6921	4822 130 83757		BAS216
6922	4822 130 83757		BAS216
Transistors and Integrated Circuits			
7102	5322 209 14542	MOS STANDARD LOGIC	HEF4066BT
7103	4822 209 15618	MOS µ-PROCESSOR	S87C654/5B44+DC397/75H
7104	4822 209 15195	IC DIG MOS	PCF82C200T*
7105	4822 209 15196	IC DIG MOS	PCA82C250
7350	4822 209 33629	IC ANA	TDA7375
7351	4822 209 33629	IC ANA	TDA7375
7352	4822 130 60511	TRANSISTOR, <1W	BC847B
7503	4822 130 60511	TRANSISTOR, <1W	BC847B
7504	4822 130 60511	TRANSISTOR, <1W	BC847B
7505	4822 130 60511	TRANSISTOR, <1W	BC847B
7506	4822 130 41078	TRANSISTOR, <1W	BC640
7507	4822 130 60511	TRANSISTOR, <1W	BC847B
7508	5322 130 60508	TRANSISTOR, <1W	BC857B
7509	4822 130 60511	TRANSISTOR, <1W	BC847B
7510	4822 209 32744	IC ANA	TEA0675T/V1
7511	4822 130 60511	TRANSISTOR, <1W	BC847B
7512	4822 130 60511	TRANSISTOR, <1W	BC847B
7513	4822 130 60511	TRANSISTOR, <1W	BC847B
7514	4822 130 60511	TRANSISTOR, <1W	BC847B
7515	4822 130 60511	TRANSISTOR, <1W	BC847B
7516	4822 130 60511	TRANSISTOR, <1W	BC847B

MD	15nF 5% X7R 63V	
MD	100nF 10% 16V	
TIC ALU.	1µF 20% 50V	
TIC ALU.	1µF 20% 50V	
TIC ALU.	1µF 20% 50V	
TIC ALU.	1µF 20% 50V	
MD	68nF 10% 16V	
TIC ALU.	22µF 20% 16V	
MD	100nF 10% 16V	
MD	100nF 10% 16V	
MD	220nF 10% 16V	
MD	39nF 10% 25V	
MD	100nF 10% 16V	
MD	220nF 10% 16V	
MD	39nF 10% 25V	
TIC ALU.	220µF 10V	
TIC ALU.	1µF 20% 50V	
TIC ALU.	1µF 20% 50V	
MD	220nF 10% 16V	
MD	220nF 10% 16V	
MD	22nF 10%X7R 63V	
MD	22nF 10%X7R 63V	
MD	68nF 10% 16V	
TIC ALU.	47µF 20% 10V	
MD	220nF 10% 16V	
TIC ALU.	220µF 20% 16V	
TIC ALU.	1µF 20% 50V	
TIC ALU.	47µF 20% 10V	
TIC ALU.	47µF 20% 16V	
TIC ALU.	4.7µF 20% 25V	
TIC ALU.	1µF 20% 50V	
TIC ALU.	2200µF 20% 16V	
MD	100nF 10% 16V	
MD	100nF 10% 16V	
MD	220nF 10% 16V	
TIC ALU.	100µF 20% 16V	
MD	100nF 10% 16V	
TIC ALU.	4.7µF 20% 25V	
TIC ALU.	4.7µF 20% 25V	
TIC ALU.	4.7µF 20% 35V	
TIC ALU.	2.2µF 20% 50V	
TIC ALU.	1µF 20% 50V	
MD	68nF 10% 16V	
TIC ALU.	47µF 20% 16V	
MD	100nF 10% 16V	
MD	100nF 10% 16V	
MD	33nF 10%X7R 63V	
MD	33nF 10%X7R 63V	
MD	33nF 10%X7R 63V	
MD	18pF 1% NP0 63V	
MD	56pF 1% NP0 63V	
TIC ALU.	10µF 16V	
MD	100nF 10% 16V	
MD	100nF 10% 16V	
TIC ALU.	2.2µF 20% 50V	
MD	33nF 10%X7R 63V	
	4k7 3% 0,1W	
	2k2 1% 0,1W	
VAR	1k 30% 0,1W	
VAR	1k 30% 0,1W	
	12k 1% 0,1W	
	2k2 1% 0,1W	
	150R 5% 0,5W	
	2k2 1% 0,1W	
	12k 1% 0,1W	
	2k2 1% 0,1W	
	110R 5% 0,5W	
	BLM31BG01SPT	

Pos.	Service Code	Description	
5001	4822 157 71267		BLM31BG01SPT
5002	4822 157 71267		BLM31BG01SPT
5004	4822 157 71267		BLM31BG01SPT
5103	4822 157 71267		BLM31BG01SPT
5104	4822 157 71267		BLM31BG01SPT
5105	4822 157 71267		BLM31BG01SPT
5106	4822 157 71267		BLM31BG01SPT
5107	4822 157 11121		EMI 50V/2A ZJY
5701	4822 157 70935		
5905	4822 152 20677		10µH
5909	4822 152 20677		10µH
Diodes			
6100	5322 130 34337		BAV99
6102	5322 130 34337		BAV99
6502	4822 130 83757		BAS216
6581	4822 130 83757		BAS216
6582	4822 130 83757		BAS216
6601	4822 130 83757		BAS216
6704	4822 130 83757		BAS216
6705	4822 130 80751	POWER RECTIFIER	1S1885A
6706	4822 130 81196	POWER RECTIFIER	S5566B
6708	4822 130 83757		BAS216
6710	4822 130 83757		BAS216
6711	4822 130 10185	REFERENCE	UDZ
6712	4822 130 82594		BAT54C
6713	4822 130 82594		BAT54C
6714	4822 130 83757		BAS216
6715	4822 130 83757		BAS216
6716	4822 130 83757		BAS216
6717	4822 130 83757		BAS216
6718	5322 130 34331		BAV70
6719	4822 130 82594		BAT54C
6720	4822 130 83757		BAS216
6721	4822 130 83757		BAS216
6722	4822 130 83757		BAS216
6723	4822 130 83757		BAS216
6724	4822 130 83757		BAS216
6726	4822 130 10655	POWER RECTIFIER	1SR154-400
6761	4822 130 10185	REFERENCE	UDZ
6762	5322 130 34331		BAV70
6904	4822 130 10185	REFERENCE	UDZ
6905	4822 130 10185	REFERENCE	UDZ
6907	4822 130 10185	REFERENCE	UDZ
6908	4822 130 10185	REFERENCE	UDZ
6909	4822 130 10185	REFERENCE	UDZ
6920	4822 130 83757		BAS216
6921	4822 130 83757		BAS216
6922	4822 130 83757		BAS216
Transistors and Integrated Circuits			
7102	5322 209 14542	MOS STANDARD LOGIC	HEF4066BT
7103	4822 209 15618	MOS µ-PROCESSOR	S87C654/5B44+DC397/75H
7104	4822 209 15195	IC DIG MOS	PCF82C200T
7105	4822 209 15196	IC DIG MOS	PCA82C250
7350	4822 209 33629	IC ANA	TDA7375
7351	4822 209 33629	IC ANA	TDA7375
7352	4822 130 60511	TRANSISTOR, <1W	BC847B
7503	4822 130 60511	TRANSISTOR, <1W	BC847B
7504	4822 130 60511	TRANSISTOR, <1W	BC847B
7505	4822 130 60511	TRANSISTOR, <1W	BC847B
7506	4822 130 41078	TRANSISTOR, <1W	BC640
7507	4822 130 60511	TRANSISTOR, <1W	BC847B
7508	5322 130 60508	TRANSISTOR, <1W	BC857B
7509	4822 130 60511	TRANSISTOR, <1W	BC847B
7510	4822 209 32744	IC ANA	TEA0675T/V1
7511	4822 130 60511	TRANSISTOR, <1W	BC847B
7512	4822 130 60511	TRANSISTOR, <1W	BC847B
7513	4822 130 60511	TRANSISTOR, <1W	BC847B
7514	4822 130 60511	TRANSISTOR, <1W	BC847B
7515	4822 130 60511	TRANSISTOR, <1W	BC847B
7516	4822 130 60511	TRANSISTOR, <1W	BC847B

Pos.	Service Code	Description	
7581	4822 130 60511	TRANSISTOR, <1W	BC847B
7601	4822 209 32995	IC ANA	TDA7313
7662	4822 130 60511	TRANSISTOR, <1W	BC847B
7663	4822 130 60511	TRANSISTOR, <1W	BC847B
7664	4822 130 60511	TRANSISTOR, <1W	BC847B
7701	4822 209 33029	IC ANA	TDA3602
7706	4822 130 60511	TRANSISTOR, <1W	BC847B
7710	5322 130 60508	TRANSISTOR, <1W	BC857B
7711	5322 130 60508	TRANSISTOR, <1W	BC857B
7712	4822 130 60511	TRANSISTOR, <1W	BC847B
7713	4822 130 60511	TRANSISTOR, <1W	BC847B
7714	4822 130 40995	TRANSISTOR, >1W	BD438
7715	5322 130 60508	TRANSISTOR, <1W	BC857B
7716	5322 130 60508	TRANSISTOR, <1W	BC857B
7717	4822 130 60511	TRANSISTOR, <1W	BC847B
7718	4822 130 60511	TRANSISTOR, <1W	BC847B
7719	4822 130 60511	TRANSISTOR, <1W	BC847B
7720	5322 130 60508	TRANSISTOR, <1W	BC857B
7721	4822 130 60511	TRANSISTOR, <1W	BC847B
7722	5322 130 60508	TRANSISTOR, <1W	BC857B
7723	5322 130 60508	TRANSISTOR, <1W	BC857B
7724	5322 130 60508	TRANSISTOR, <1W	BC857B
7760	4822 130 60511	TRANSISTOR, <1W	BC847B
7761	4822 130 60511	TRANSISTOR, <1W	BC847B
7762	4822 130 60511	TRANSISTOR, <1W	BC847B
7763	4822 130 60511	TRANSISTOR, <1W	BC847B
7764	5322 130 60508	TRANSISTOR, <1W	BC857B
7765	4822 130 60511	TRANSISTOR, <1W	BC847B
7768	5322 130 60508	TRANSISTOR, <1W	BC857B
7769	4822 130 60511	TRANSISTOR, <1W	BC847B
7906	5322 209 11446	MOS STANDARD LOGIC	HEF4051BT
7907	4822 130 60511	TRANSISTOR, <1W	BC847B
7908	4822 130 60511	TRANSISTOR, <1W	BC847B
7909	4822 130 42615	TRANSISTOR, <1W	BC817-40
7910	4822 130 60511	TRANSISTOR, <1W	BC847B
7911	4822 209 15619	MOS µ-PROCESSOR	P87CE560EFB/00+DC397/75H
7912	5322 209 12323	MOS EEPROM	CAT24C16PI
7915	4822 130 42615	TRANSISTOR, <1W	BC817-40

For other components please refer also to Standard Components Catalogue of Philips Euroservice.

MECHANICAL PARTS LIST

5	4822 492 71046	MOUNTING SPRING
7	4822 413 31857	KNOB VOLUME
8	4822 413 31664	KNOB FADER, BASS, TREBLE
9	4822 410 63788	KNOB ASSY FOR CASSETTE
11	4822 267 31697	CONNECTOR AERIAL
1001–1001	4822 210 10752	TUNER IC96 14SV
1001–1002	4822 265 10808	CON BM V 10P M 1.27 90715 B
1001–1004	4822 257 40818	CON BM V 5P F 2.54 90720 B
1001–1005–1332	4822 100 11752	POT FADER
1001–1005–1333	4822 100 11752	POT BASS
1001–1005–1334	4822 100 11752	POT TREBLE
1001–1006–1336	4822 100 12255	POT VOLUME
1001–1007	4822 265 10908	CON BM V 10P F 1.00 FFC 0.3 B
1001–1009	4822 265 10599	CONNECTOR SPRING -INNOVAN-
1001–1010	4822 265 10814	CONNECTOR BLOCK ASSY
1002	4822 691 10556	TAPE DECK LCA*1–4/1
1003–1800	4822 459 04498	DETACHABLE UNIT
1003–1805	4822 459 04559	ORNAMENTAL PLATE ASSY
1003–1805–4	4822 443 10637	CASSETTE FLAP
1003–1805–17	4822 492 42533	SPRING CASSETTE FLAP

Cassette Car Radio 22DC397/75L

22DC397/75E

Service
Service
Service

Supplement

Use this supplement together with Service Manual 22DC397/75 (4822 725 23533)
For repair information of the tape deck see Service Manual LCA*1-4/1 (4822 725 23538)

Service Manual

12 V

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GENERAL INFORMATION

The 22DC397/75L succeeds the 22DC397/75 as OPEL model CCR 600. The 22DC397/75E is to be used together with the *Bose sound system*. Both are based on the same new PWB layout, differences in components are marked in the respective circuit diagrams.

Some parts of the electrical circuits have been modifed, if compared to the former 22DC397/75, but the features and functionality of the set remain unchanged.

WARNING

ATTENTION
Static Sensitive Devices
Handle Only at Static
Safe Work Stations.

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD).

Careless handling during repair may reduce life time of these components drastically.

When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

Appropriate ESD equipment can be ordered under followings service codes:

Anti-static table mat	large	1200 x 650 x 1,25 mm	4822 466 10953
	small	600 x 650 x 1,25 mm	4822 466 10958
Connection box (1 MΩ)			4822 320 11307
Complete kit ESD3			4822 310 10671
Wristband tester			4822 344 13999

NOTE

For EEPROM programming purposes a Gateway Interface is available at Consumer Service Eindhoven.
The service code of the kit is 4822 395 10297. Use the EEPROM data diskette (see parts list) to update/expand your software.

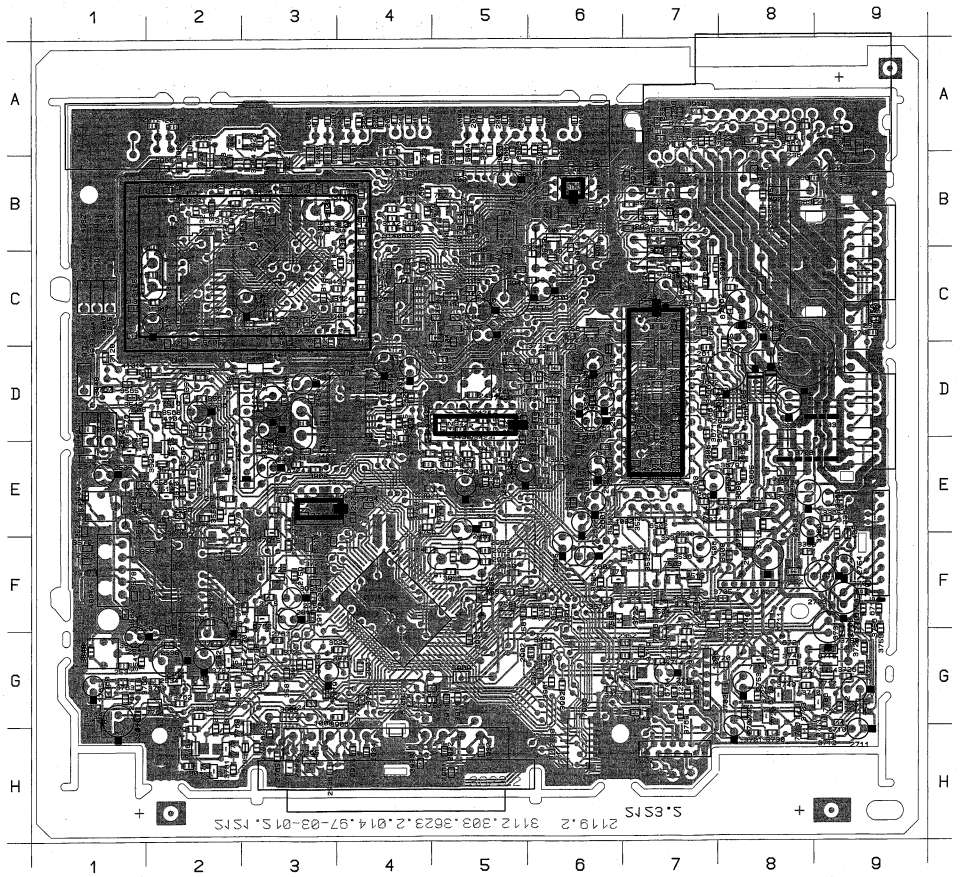
If you still have any problems concerning Security Code, EEPROM programming or defective EEPROMs , please forward the set to:

Car Systems Wetzlar
Service (SP-RC)
Philipsstraße 1
35 576 Wetzlar
Germany

EEPROM PARAMETER SETTINGS TABLE

				22DC397/75L		22DC397/75E		
NO	**FUNCTION**	**RANGE**	**GRID**	**DEF. VALUE**	**DEF. PAR**	**DEF. VALUE**	**DEF. PAR**	**ADDRESS**
	Tuner Adjustment							
10	TP maximum time out / auto tuning time cycle	01 ... 0F H / 10 ... 150 s	10 s	40 s	04 H	40 s	04 H	37 H
	RDS Parameter							
16	Synchronization break down time out cycle during TA	01 ... 0F H / 10 ... 150 s	10 s	120 s	0C H	120 s	0C H	41 H
17	TP-EON acceptance level for TA	35 ... FF H / 20 ... 60 dBµV		38 dBµV	95 H	38 dBµV	95 H	38 H
18	FM-Memory, Non-RDS station acceptance level	35 ... FF H / 20 ... 60 dBµV		36 dBµV	8A H	36 dBµV	8A H	31 H
19	LV = Field strength reaction level	00 ... 06 H	synthetic		03 H		03 H	34 H
20	MP = Multipath reaction level	00 ... 06 H	values for		03 H		03 H	36 H
21	REL = Suppression counter release	40 ... C0 H	receiver		60 H		60 H	33 H
22	SUPP = Suppression counter	10 ... C0 H	sub-		96 H		96 H	32 H
23	NS = Noise reaction level	00 ... 06 H	system		03 H		03 H	35 H
24	AF check agility static	11 ... 30 H / 12 ... 4,4 min			1A H		1A H	3D H
25	AF check agility dynamic	02 ... 05 H / 0,2 ... 0,5 s	0,1 s	0,4 s	04 H	0,4 s	04 H	3E H
26	Minimum duration between AF checks	02 ... 14 H / 0,2 ... 2 s	0,2 s	0,8 s	04 H	0,8 s	04 H	3F H
27	AF minimum quality base	5A ... 80 H	synth. val		74 H		74 H	40 H
	Audio Control							
- -	TA Volume level	00 ... 06 H / -7,5 dB ... +7,5 dB	2,5 dB	0 dB	03 H	0 dB	03 H	43 H
31	TA Bass level	00 ... 06 H / -6 dB ... +6 dB	2 dB	-4 dB	01 H	-6 dB	00 H	45 H
32	TA Treble level	00 ... 06 H / -6 dB ... +6 dB	2 dB	-2 dB	02 H	-2 dB	02 H	46 H
33	TA Fader level (Rear to Front)	00 ... 06 H / -15 dB ... 0 dB	2,5 dB	-2,5 dB	05 H	-2,5 dB	05 H	44 H
- -	Telephone Volume level	00 ... 06 H / -7,5 dB ... +7,5 dB	2,5 dB	-10 dBr	03 H	-10 dBr	03 H	4A H
34	Telephone Bass level	00 ... 06 H / -6 dB ... +6 dB	2 dB	0 dB	03 H	0 dB	03 H	4C H
35	Telephone Treble level	00 ... 06 H / -6 dB ... +6 dB	2 dB	-2 dB	02 H	-2 dB	02 H	4D H
36	Telephone Fader level (Rear to Front)	00 ... 06 H / -15 dB ... 0 dB	2,5 dB	-2,5 dB	05 H	-2,5 dB	05 H	4B H
37	Power-On Volume level	00 ... 1A H / -80 dB ... 0 dB		-37 dB	0A H	-37 dB	0A H	50 H
	Speed Dependent Control							
- -	Impulse generator	01 ... 03 H			02 H		03 H	51 H
41	SD-FRQ1 (v1) / + 2 dB Bass	00 ... FF H / 0 ... 255 km/h	1 km/h	70 km/h	46 H	40 km/h	28 H	55 H
42	SD-FRQ2 (v2) / + 2 dB Bass	00 ... FF H / 0 ... 255 km/h	1 km/h	120 km/h	78 H	90 km/h	5A H	56 H
43	SD-FRQ3 (v3) / + 2 dB Bass	00 ... FF H / 0 ... 255 km/h	1 km/h	40 km/h	28 H	40 km/h	28 H	57 H
44	SD-FRQ4 (v4) / + 2 dB Bass	00 ... FF H / 0 ... 255 km/h	1 km/h	90 km/h	5A H	90 km/h	5A H	58 H
45	SD-FRQ5 (v5) / + 2 dB Bass	00 ... FF H / 0 ... 255 km/h	1 km/h	140 km/h	8C H	160 km/h	A0 H	59 H
- -	Volume curve	00 ... 05 H			03 H		03 H	53 H
	Illumination							
51	Illumination Logic A/B	00, 01 H / A, B		Logic A	00 H	Logic A	00 H	5A H
52	Illumination level X0	00 ... FF H			00 H		00 H	5B H
53	Illumination level Y0	00 ... FF H			00 H		00 H	5C H
54	Illumination level X1	00 ... FF H			50 H		50 H	5D H
55	Illumination level Y1	00 ... FF H			0E H		0E H	5E H

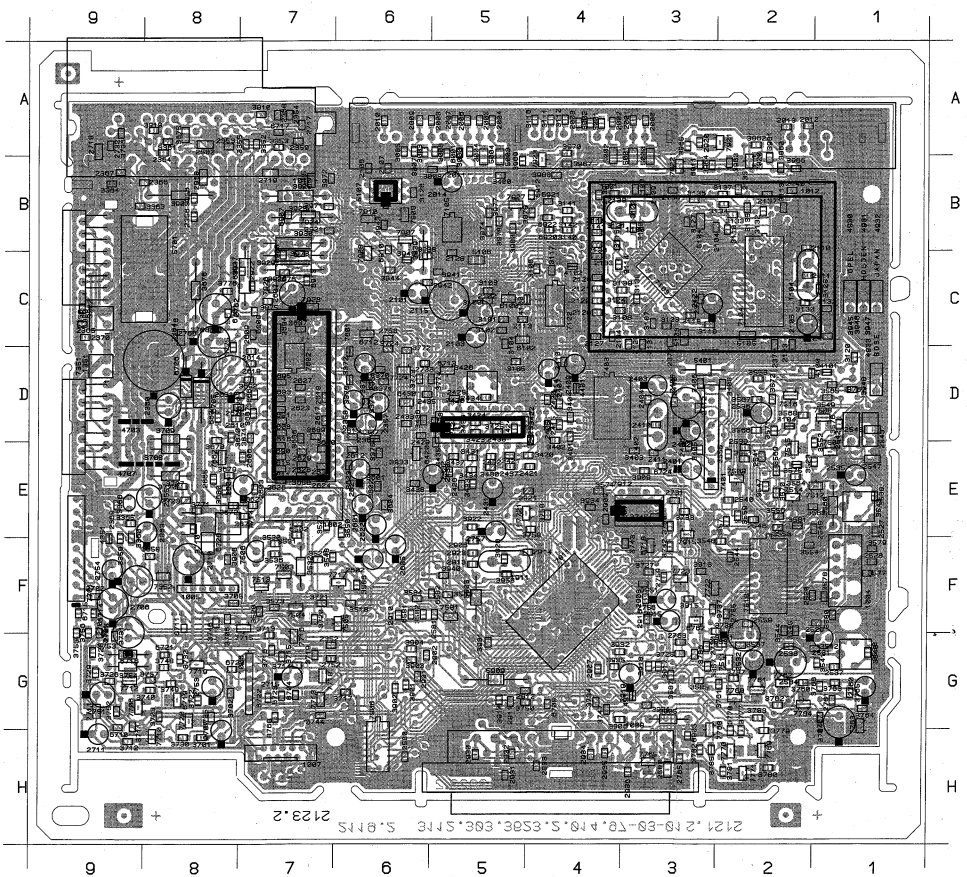
LAYOUT MAIN PWB, VIEW A



1001	A4	2359	A7	2601	E6	2912	G4	3359	F9
1002	E7	2360	D8	2602	F6	2913	F5	3360	F9
1004	F1	2362	D6	2603	E7	2914	F4	3361	A8
1005	F8	2363	E8	2604	E7	2915	F3	3362	C9
1006	G7	2364	A8	2605	F6	2916	F3	3363	B9
1007	H7	2365	C9	2606	E7	2917	E4	3364	B9
1009	H4	2366	B8	2607	C7	2918	B8	3365	E9
1010	A8	2367	B9	2608	D7	2919	G3	3366	E9
1012	C3	2368	A7	2609	C7	2920	A3	3370	D6
1103	B3	2369	E9	2610	D8	2921	B7	3371	D6
1104	C2	2370	C9	2611	E7	2922	C7	3372	D6
1350	C9	2371	C2	2612	E6	2923	F5	3373	D6
1351	D9	2372	C3	2613	D6	2930	H5	3374	D6
1402	D3	2373	C3	2614	D7	2931	H5	3375	E6
1911	F5	2401	E3	2615	E7	2932	H5	3376	D6
2000	A3	2402	D3	2616	D7	2933	H4	3377	D6
2001	A3	2403	D3	2617	D7	2934	H4	3400	B5
2002	A4	2404	D3	2618	D7	2935	H4	3401	D4
2003	A4	2405	D4	2619	D7	2936	H3	3402	D4
2004	A5	2406	E3	2620	D8	3000	A5	3403	E3
2005	A5	2407	D4	2621	E6	3001	A4	3404	D4
2006	A5	2408	D3	2622	E6	3002	A4	3405	E3
2007	A5	2409	D4	2623	D7	3003	A6	3406	D3
2008	A5	2410	D3	2624	E7	3004	A5	3408	D2
2009	A6	2411	E3	2625	D8	3005	A6	3420	E4
2010	A6	2412	D3	2626	E7	3006	A5	3421	E5
2011	B5	2413	D4	2627	D7	3007	A6	3422	D5
2012	A2	2414	D4	2628	E7	3008	B5	3423	D5
2013	A2	2415	D4	2629	E7	3100	C5	3424	D5
2014	B5	2420	D4	2630	E7	3101	C5	3425	D5
2101	C6	2421	E4	2631	D7	3102	C5	3426	D5
2102	C5	2423	D4	2662	E7	3103	C5	3430	E5
2103	C5	2424	D5	2665	E8	3104	C5	3431	E5
2104	B3	2425	D5	2701	F9	3105	D5	3432	E5
2105	C2	2426	E5	2702	F9	3106	C4	3433	E5
2106	B6	2427	D5	2706	F9	3107	C3	3434	E5
2107	B6	2428	D5	2707	H8	3108	C4	3435	E5
2108	B3	2429	D6	2708	F9	3109	B3	3436	D6
2109	B3	2430	E5	2710	F8	3110	B3	3437	E5
2110	B2	2431	E5	2711	H9	3111	A4	3438	E6
2111	C2	2432	E5	2715	G7	3112	A4	3439	D5
2113	C5	2433	D6	2716	D8	3113	B2	3518	F6
2115	C5	2434	D5	2717	A7	3114	C4	3520	F7
2116	B4	2435	D6	2718	A9	3115	B4	3523	E1
2120	C4	2437	E5	2719	B7	3116	A4	3525	F7
2121	C4	2438	D5	2730	G3	3117	C4	3527	E7
2122	C3	2440	D3	2731	E3	3118	C3	3530	F7
2123	C2	2527	E1	2732	A9	3119	C3	3531	E7
2124	C1	2528	F1	2733	D6	3120	D1	3532	F7
2125	C3	2529	F1	2751	G9	3121	B4	3536	F7
2126	C4	2530	F1	2752	G7	3122	B3	3537	G2
2127	C4	2531	G1	2753	G8	3123	C3	3538	G1
2128	C5	2532	G2	2754	F9	3124	C4	3539	E1
2129	C4	2533	G2	2755	F2	3125	C1	3540	G1
2130	B4	2534	G2	2756	F3	3126	B6	3541	G1
2131	C3	2535	E1	2757	E5	3127	B3	3542	G1
2132	C1	2536	D2	2758	C6	3130	C2	3543	E1
2133	C4	2537	G1	2759	F3	3132	B2	3544	F2
2134	C4	2538	G2	2760	G1	3133	B2	3545	F2
2135	B2	2539	E2	2761	G1	3134	B2	3546	F2
2136	B3	2540	E2	2762	C8	3135	B2	3547	E2
2137	B2	2541	E2	2763	G3	3136	B3	3548	F7
2138	B4	2542	D1	2764	C8	3137	B2	3549	D1
2139	B4	2543	D1	2765	H3	3138	C3	3550	E6
2140	B2	2544	F2	2766	C8	3139	C4	3551	E2
2141	B4	2545	E1	2767	G1	3140	B4	3552	E1
2351	D6	2546	E2	2901	G6	3141	B4	3553	D2
2352	G7	2547	E1	2902	G6	3142	B4	3554	F2
2353	A8	2548	D1	2906	F5	3352	A7	3555	E2
2354	A7	2559	F2	2907	G4	3353	A7	3556	E2
2355	E8	2580	H6	2908	F3	3355	A7	3557	E2
2356	B8	2581	F5	2909	E4	3356	B8	3558	E2
2357	D6	2582	A8	2910	F6	3357	G3	3559	E2
2358	D6	2583	H3	2911	G5	3358	F8	3560	E1

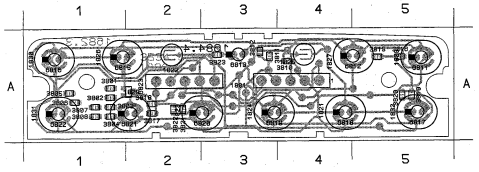
LAYOUT MAIN PWB, VIEW B

3563	E1	3726	G9	3915	F3	5104	B3	7516	D2
3564	E2	3727	F3	3917	G3	5105	C2	7581	F5
3565	D1	3728	G9	3918	G3	5106	C5	7601	D7
3566	D2	3729	G9	3919	A8	5107	B6	7602	D7
3567	D2	3730	H8	3920	F5	5401	D3	7662	E8
3568	D2	3731	G9	3921	E4	5701	C8	7701	F9
3569	E2	3732	G8	3922	E5	5905	F5	7706	G9
3570	E2	3733	E3	3924	G3	5909	G5	7710	H8
3571	D2	3734	G4	3925	B7	6001	A5	7711	G9
3572	D2	3735	G8	3926	C7	6100	C5	7712	G9
3573	F7	3736	A9	3927	C7	6102	C5	7713	G7
3574	E4	3737	F3	3928	B7	6420	E6	7714	E8
3575	E2	3738	F2	3929	C7	6430	D6	7715	F7
3576	D1	3739	E3	3930	B7	6502	E7	7716	G7
3577	F1	3740	G8	3931	G5	6581	F6	7717	F6
3578	F1	3741	G2	3932	G4	6582	F5	7718	G7
3579	F1	3742	F3	3933	E6	6601	D8	7719	G8
3580	F1	3743	F3	3934	E4	6704	G7	7720	G8
3581	E2	3744	G7	3935	G4	6705	D8	7721	E4
3582	F6	3745	E3	3938	C6	6706	D8	7722	F3
3583	F5	3746	F8	3939	B6	6708	G4	7723	F3
3584	F6	3747	G4	3940	F5	6710	G9	7724	D6
3585	G3	3748	G8	3941	C5	6711	F8	7760	G2
3586	F6	3749	G8	3942	C6	6712	C6	7761	G2
3587	G3	3750	G4	3943	B6	6713	D5	7762	G2
3601	E6	3751	F9	3944	C6	6714	F9	7763	G1
3602	E6	3752	G9	3945	C1	6715	F9	7764	G2
3603	E6	3753	G9	3946	C1	6716	G9	7765	H3
3604	E6	3754	G9	3947	C1	6717	A7	7768	H3
3660	E7	3755	F9	3948	D1	6718	F3	7769	H2
3666	D7	3756	F9	3949	C6	6719	G8	7770	H2
3667	D7	3757	G8	3951	F3	6720	G8	7771	H2
3670	D8	3758	E4	3958	F5	6721	G8	7906	H6
3671	D7	3759	E4	3960	B2	6722	G7	7907	B6
3672	E8	3760	G2	3961	B2	6723	G7	7908	C6
3674	E7	3761	G2	3962	A2	6724	E3	7909	B6
3675	A8	3762	G2	3963	B2	6726	F8	7910	B6
3676	C8	3763	G1	3964	B3	6761	C8	7911	F4
3678	D8	3764	G1	3965	A3	6762	F3	7912	E3
3679	E8	3765	G1	3966	B2	6904	C7	7915	E3
3680	E8	3766	G1	3967	B4	6905	H3	7920	B2
3686	D7	3767	D1	3968	B4	6907	B7	7921	A2
3687	C7	3768	C8	3969	B5	6908	C7	7922	B3
3688	E7	3769	G7	3970	A4	6909	C7	7923	B4
3689	D7	3770	E8	3971	B7	6910	B6	7924	B7
3690	E7	3771	E8	3972	B7	6911	B3	7925	B7
3691	D7	3772	D6	3973	C7	6912	B4	7926	C7
3692	D7	3773	D6	3974	B5	6913	C7	7927	B5
3693	D7	3774	D5	3975	C7	6920	B4	7928	C7
3694	C7	3775	D8	3976	C7	6921	B4	S71	G3
3695	D7	3776	C8	3977	B5	6922	B4	S91	G5
3701	H8	3777	H2	3978	B5	7102	C4	S92	G5
3702	G8	3778	H2	3979	B4	7103	C3	S93	G5
3703	G8	3779	H2	3980	B5	7104	C2	S94	H5
3705	F8	3780	H2	4100	D2	7105	B5	S95	H3
3706	F8	3781	H2	4101	D1	7350	C9	S96	G4
3707	E8	3782	H3	4102	C4	7351	D9	S97	H3
3708	E8	3783	G2	4103	C4	7352	F8	S99	G3
3709	D8	3784	G1	4104	D2	7401	D3		
3710	E8	3785	H3	4351	F9	7403	D4		
3711	G9	3786	G3	4401	D4	7420	D5		
3712	H9	3787	G2	4703	D9	7503	F7		
3713	G7	3901	G6	4707	E8	7504	F7		
3714	G7	3902	G6	4911	G3	7505	F6		
3715	G7	3903	G6	4930	C1	7506	F7		
3716	G7	3904	G6	4931	C1	7507	E1		
3717	G6	3905	G3	4932	C1	7508	D1		
3719	G7	3906	G4	4933	D1	7509	E2		
3720	F7	3907	B8	5000	B3	7510	F2		
3721	F7	3908	F8	5001	B3	7511	G2		
3722	G8	3909	E3	5002	B4	7512	E1		
3723	E8	3910	A7	5003	B5	7513	F7		
3724	D6	3913	F3	5004	B5	7514	E2		
3725	G3	3914	G5	5103	C3	7515	E2		

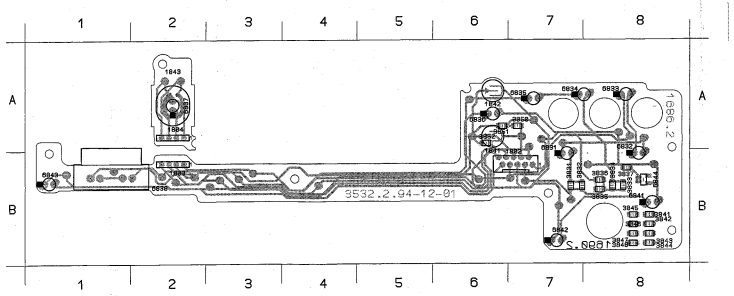


LAYOUT DETACHABLE FRONT, FRONT PWB

1801	A 3	1827	A 5	3802	A 1	3810	A 4	3819	A 5	6813	A 3	6821	A 2
1821	A 4	1828	A 5	3803	A 1	3811	A 3	3820	A 5	6815	A 1	6822	A 1
1822	A 2	1829	A 2	3804	A 1	3812	A 3	3821	A 2	6816	A 1	6823	A 2
1823	A 3	1830	A 1	3805	A 1	3815	A 5	3822	A 2	6817	A 5		
1824	A 3	1831	A 1	3806	A 1	3816	A 5	3823	A 3	6818	A 4		
1825	A 4	1832	A 5	3807	A 1	3817	A 2	6811	A 5	6819	A 3		
1826	A 1	3801	A 1	3808	A 1	3818	A 2	6812	A 5	6820	A 3		

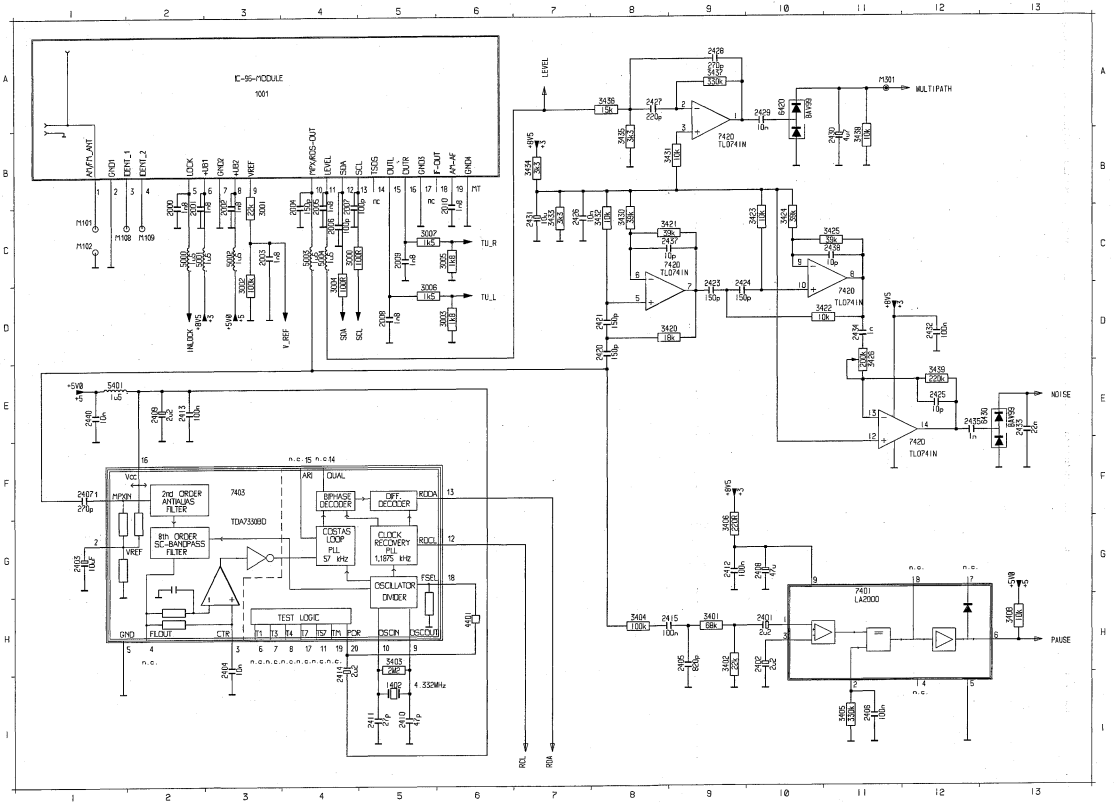


1802	B 7	1842	A 6	3833	B 8	3837	B 8	3844	B 8	3848	B 8	6831	B 7	6835	A 7	6841	B 8
1803	B 2	1843	A 2	3834	B 8	3841	B 8	3845	B 8	3850	A 7	6832	B 8	6836	A 6	6842	B 7
1804	A 2	3831	B 7	3835	B 8	3842	B 8	3846	B 8	3851	A 6	6833	A 8	6837	A 2	6843	B 1
1841	A 6	3832	B 7	3836	B 8	3843	B 8	3847	B 8	3852	A 6	6834	A 8	6838	B 1	6844	B 8



TUNER, RDS

1001	A 3	2007	B 4	2406	I 1	2415	H 9	2429	A10	2440	E 1	3401	H 9	3422	D11	3434	B 7	5002	C 3	7420	C 8
1402	I 5	2008	D 5	2407	F 1	2420	D 8	2430	B11	3000	C 4	3402	H 9	3423	C10	3435	B 8	5003	C 4	7420	D11
2000	B 2	2009	C 5	2408	G10	2421	D 8	2431	C 7	3001	B 3	3403	H 5	3424	C10	3436	A 8	5004	C 4	7420	F12
2001	B 2	2010	B 6	2409	E 2	2423	D 9	2432	D12	3002	C 3	3404	H 8	3425	C11	3437	A 9	5401	E 1	M101	C 1
2002	B 3	2401	H10	2410	I 5	2424	D 9	2433	E13	3003	D 6	3405	I 1	3426	D11	3438	B11	6420	A10	M102	C 1
2003	C 3	2402	H10	2411	I 5	2425	E12	2434	D11	3004	C 4	3406	G 9	3430	C 8	3439	E12	6430	E12	M108	C 1
2004	B 4	2403	G 1	2412	G 9	2426	C 7	2435	E12	3005	C 6	3408	H13	3431	B 9	4401	H 6	7401	H11	M109	C 2
2005	B 4	2404	H 3	2413	E 2	2427	A 8	2437	C 9	3006	D 5	3420	D 9	3432	C 8	5000	C 2	7403	F 3	M301	A11
2006	C 4	2405	H 9	2414	H 4	2428	A 9	2438	C11	3007	C 5	3421	C 9	3433	C 7	5001	C 2	7420	B 9		



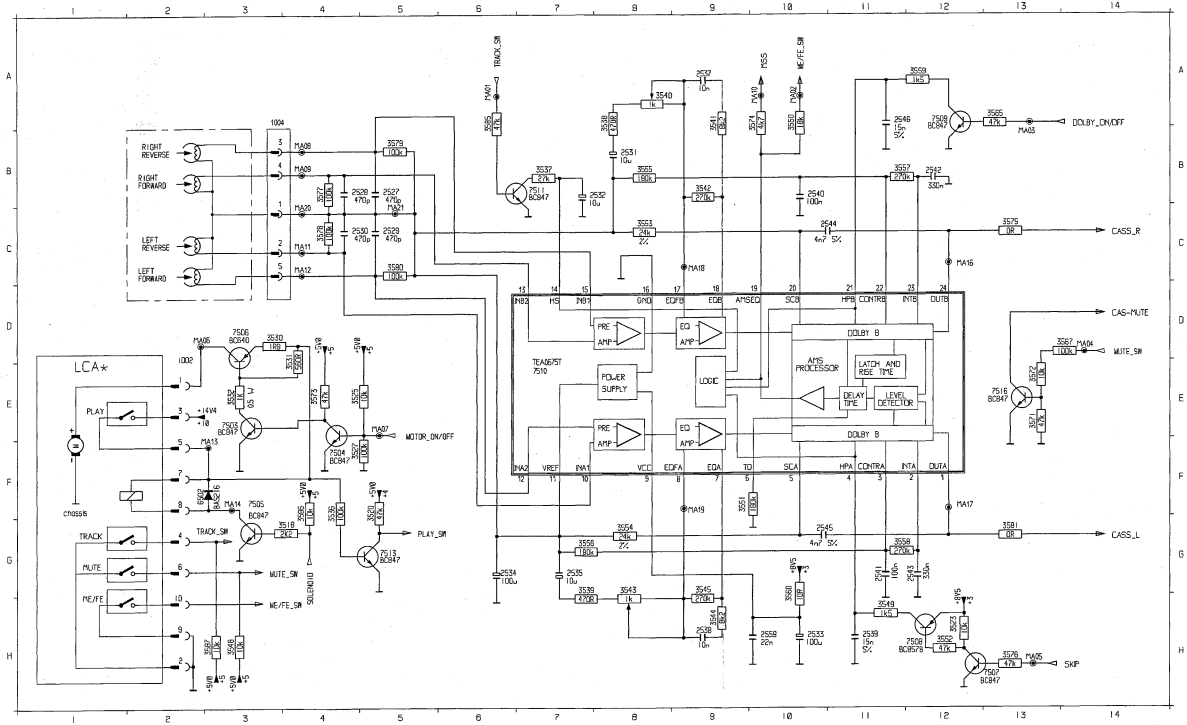
Tuner IC 96
1. 0V
2. Gnd
3. 0V
4. 0V
5. 5,0V
6. 8,5V
7. Gnd
8. 5,0V
9. 5,0V
10. 3,0V (FM) / 0V (AM)
11. 2,0V - 6,0V
12. SDA
13. SCL
14. 1,0V (FM) / 2,7V (AM)
15. 3,3V
16. 3,3V
17. Gnd
18. 0V
19. 4,7V (FM) / 3,3V (AM)

TDA 7330
1. 2,7V
2. 2,2V
3. 1,4V
4. nc
5. Gnd
6. nc
7. nc
8. nc
9. 4,332MHz
10. 4,332MHz
11. nc
12. RCL
13. RDA
14. nc
15. nc
16. 5,0V
17. nc
18. 0V
19. nc
20. 0V

LA 2000
1. 2,0V
2. 7,3V / 0V (Pause)
3. 2,0V
4. nc
5. Gnd
6. 5,0V / 0V (Pause)
7. nc
8. nc
9. 7,4V

TAPE DECK, DOLBY

1002	D 2	2533	H10	2542	B12	3523	H12	3538	A 8	3548	H 3	3556	G 7	3572	E13	3580	C 5	7505	F 3	7516	E13	MA00	B 4	MA17	F12
1004	A 3	2534	G 6	2543	G12	3525	F 4	3539	G 7	3549	H11	3557	B11	3573	E 4	3581	G13	7506	D 3	7517	A 6	MA01	A 6	MA18	C 9
2527	B 5	2535	G 7	2544	C11	3527	F 4	3540	A 8	3550	A10	3558	G11	3574	A10	3585	A 6	7507	H13	7518	H12	MA02	A10	MA19	F 9
2528	B 5	2537	A 9	2545	G10	3530	D 3	3541	F 9	3551	F 9	3559	A12	3575	C13	3586	F 4	7508	H12	7519	A12	MA03	B13	MA20	C 4
2529	C 5	2538	H 9	2546	A11	3531	D 4	3542	B 8	3552	H12	3560	G10	3576	H13	3587	H 3	7509	A12	7520	D14	MA04	D14	MA21	C 5
2530	C 5	2539	H11	2559	H10	3532	E 3	3543	G 8	3553	C 8	3565	A13	3577	B 4	5502	F 2	7510	E 7			MA05	H13		
2531	B 6	2540	B10	3518	G 4	3536	F 4	3544	H 9	3554	G 8	3567	D14	3578	C 4	7503	E 3	7511	B 7			MA06	D 2		
2532	B 8	2541	G11	3520	F 5	3537	B 7	3545	G 9	3555	B 8	3571	E13	3579	B 5	7504	F 4	7513	G 5			MA07	E 5		



TEA 0675T

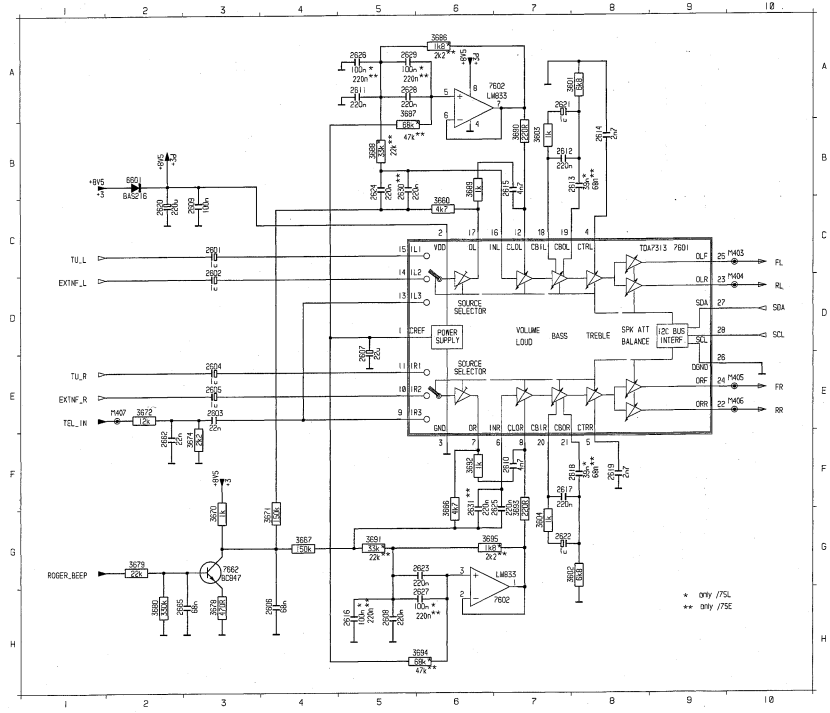
1. 4,0V
2. 4,0V
3. 4,0V
4. 4,0V
5. 4,0V
6. 6,3V (NOR) / 2,6V (REV)
7. 4,0V
8. 4,0V
9. 8,2V
10. 4,0V
11. 4,0V
12. 4,0V
13. 4,0V
14. 6,3V
15. 4,0V
16. Gnd
17. 4,0V
18. 4,0V
19. 4,6V / 0V (Pause)
20. 4,0V
21. 4,0V (□□ On) / 0,5V (□□ Off)
22. 4,0V
23. 4,0V
24. 4,0V

CON 1002 (LCA)

1. 14,0V / 0V (Motor Off)
2. Gnd
3. 14,4V
4. 0V
5. 14,4V / 0V (Eject)
6. 0V / 4,5V (Mute)
7. 14,4V / 0V (Eject)
8. 0,3V / 14,0V (MSS)
9. Gnd
10. 0V (FE) / 5,0V (ME)

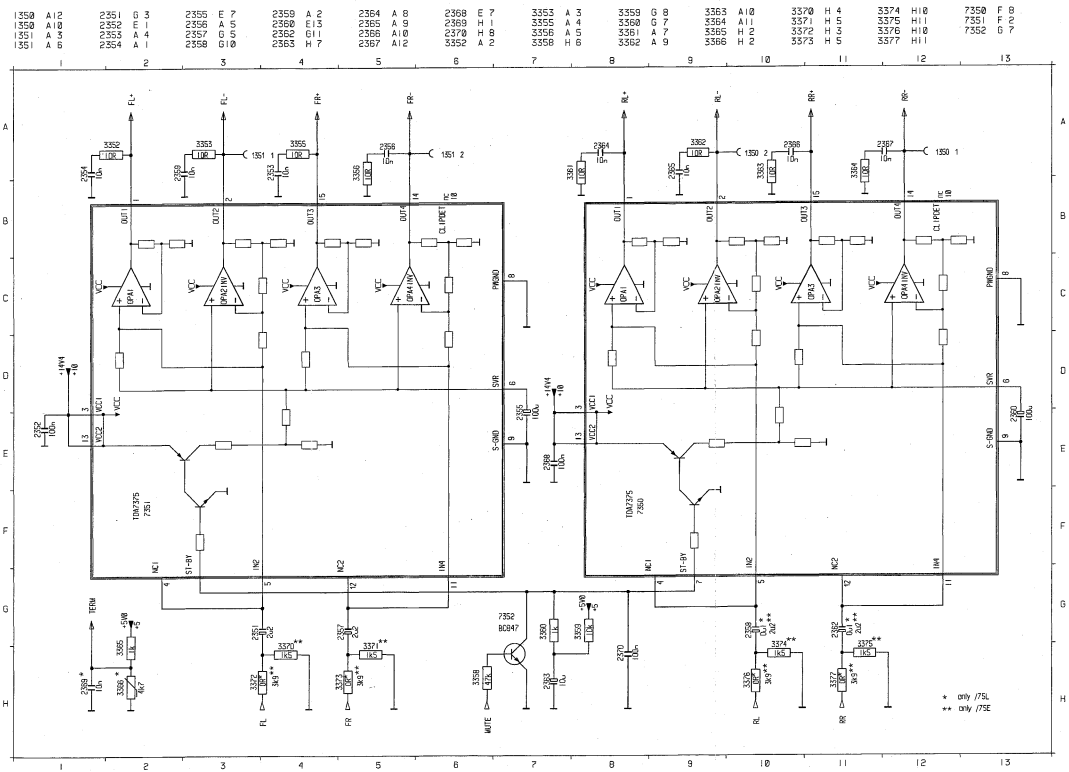
SOFAC

2601	C 3	2609	C 3	2617	F 7	2625	F 7	2665	H 2	3670	G 3	3687	A 5	3695	G 6	M405	E10
2602	C 3	2610	F 7	2618	F 8	2626	A 5	3601	A 8	3671	G 4	3688	B 5	6801	B 2	M406	E10
2603	E 3	2611	A 5	2619	F 8	2627	H 6	3602	G 8	3672	E 2	3689	B 6	7601	C 9	M407	E 2
2604	E 3	2612	B 7	2620	C 2	2628	A 5	3603	B 7	3674	F 3	3690	B 7	7602	H 7		
2605	E 3	2613	B 8	2621	A 7	2629	A 5	3604	G 7	3678	H 3	3691	G 5	7662	A 6		
2606	H 4	2614	B 8	2622	G 7	2630	B 5	3660	C 8	3679	G 2	3692	F 6	7662	G 3		
2607	D 5	2615	B 7	2623	G 6	2631	F 6	3666	F 6	3680	H 2	3693	F 7	M403	C10		
2608	H 5	2616	H 5	2624	B 5	2662	F 2	3667	G 4	3686	A 6	3694	H 6	M404	D10		



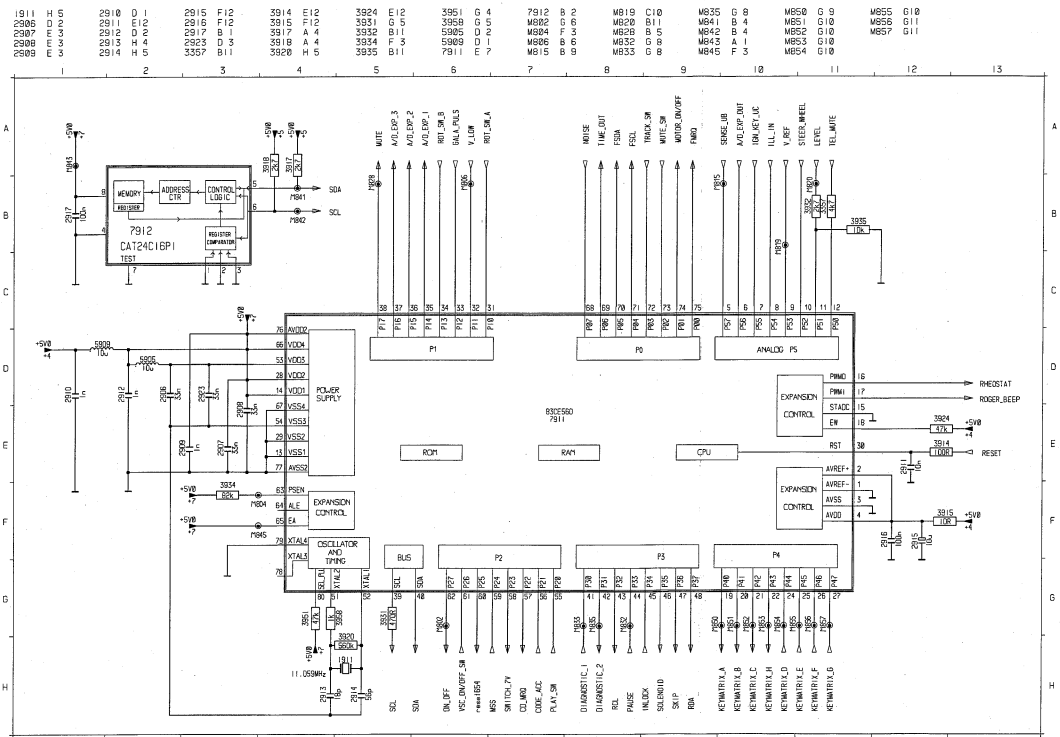
TDA 7313	
1.	3,8V
2.	7,7V
3.	Gnd
4.	3,8V
5.	3,8V
6.	3,8V
7.	3,8V
8.	3,8V
9.	3,8V
10.	3,8V
11.	3,8V
12.	3,8V
13.	3,8V
14.	3,8V
15.	3,8V
16.	3,8V
17.	3,8V
18.	3,8V
19.	3,8V
20.	3,8V
21.	3,8V
22.	3,8V
23.	3,8V
24.	3,8V
25.	3,8V
26.	Gnd
27.	SDA
28.	SCL

POWER AMPLIFIER



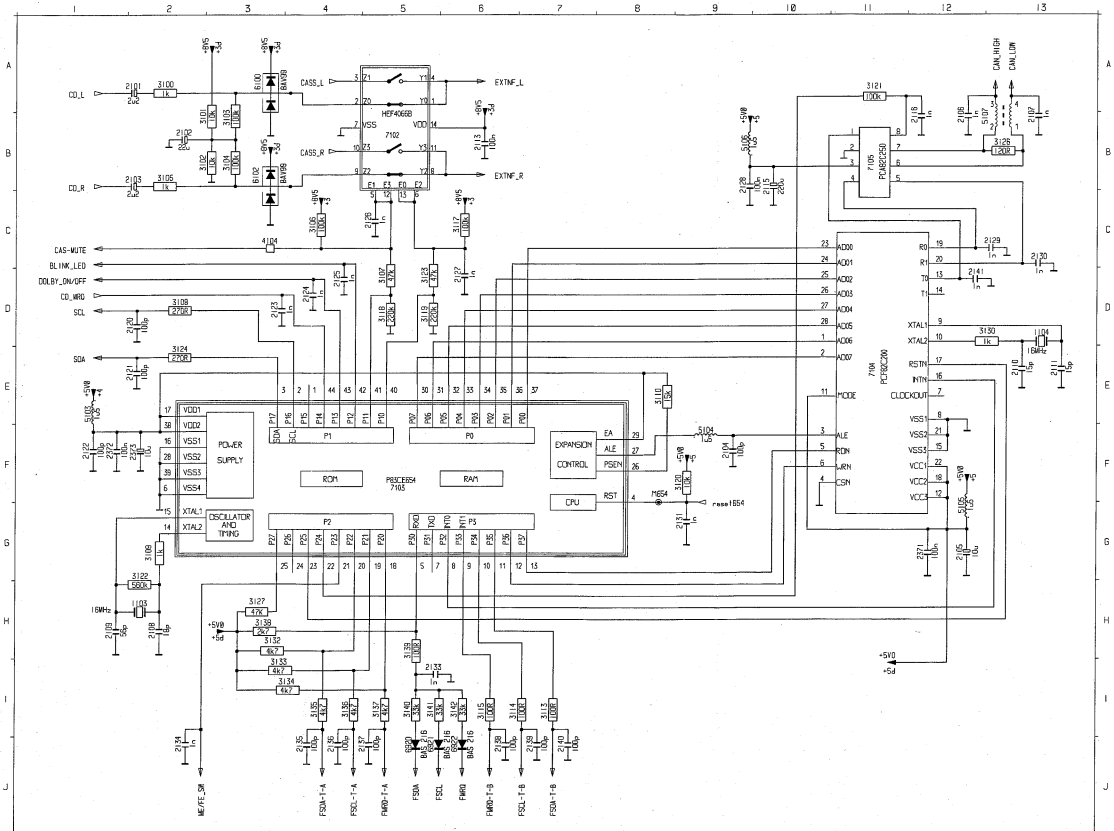
TDA7375	
1:	7,0V
2:	7,0V
3:	14,4V
4:	0,7V
5:	0,7V
6:	0,7V
7:	4,1V
8:	Gnd
9:	Gnd
10:	nc
11:	0,7V
12:	0,7V
13:	14,4V
14:	7,0V
15:	7,0V

MASTER µ-PROCESSOR



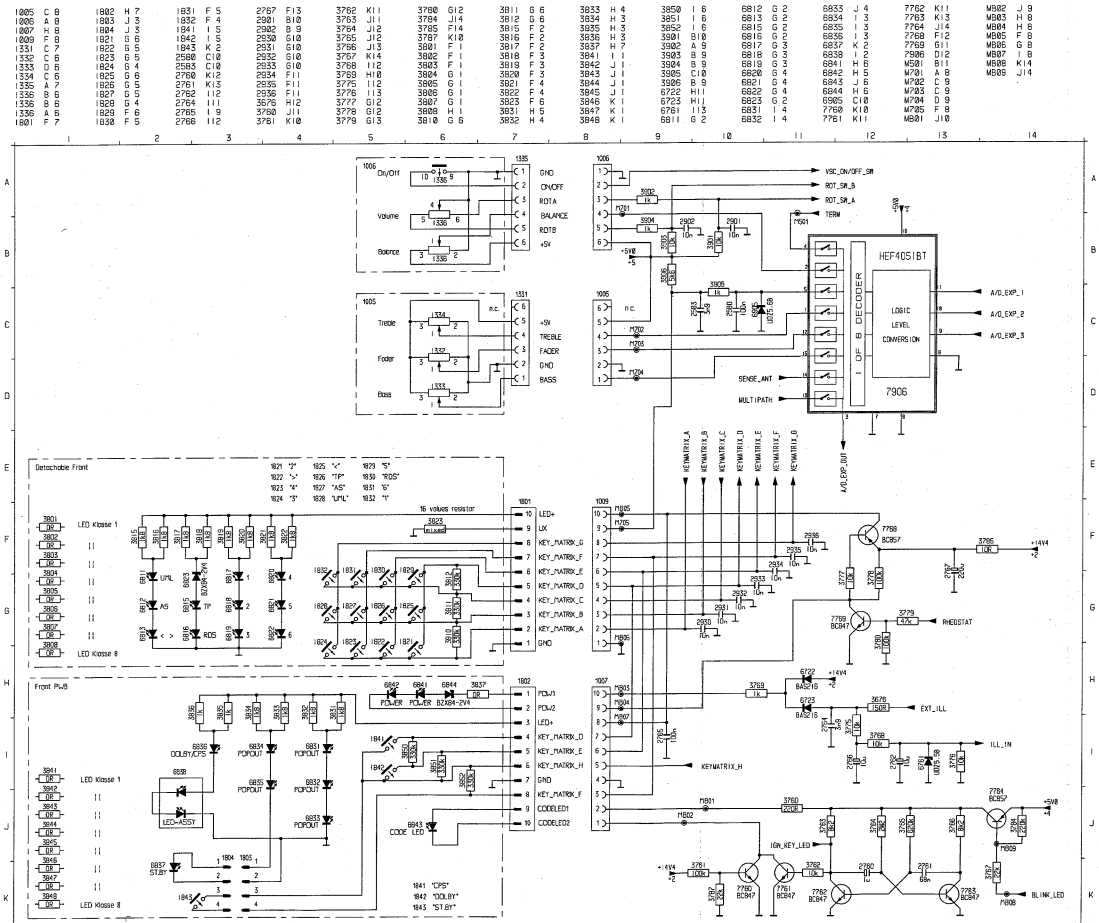
83 CE560	12: 5,0V (Tel Off)	24: 5,0V	36: Data	48: RDA	60: 0V	72: 0V (NOR) / 2,8V (REV)	CAT24C16
1: Gnd	13: Gnd	25: 5,0V	37: Data	49: nc	61: 5,0V	73: 0V / 4,5V (Cass Mute)	1: Gnd
2: 5,0V	14: 5,0V	26: 5,0V	38: 0V	50: nc	62: 0V / 4,3V (Set Off)	74: 0,7V / 0V (Motor On)	2: Gnd
3: Gnd	15: Gnd	27: 5,0V	39: SCL	51: 11,059MHz	63: 5,0V	75: Data	3: Gnd
4: 5,0V	16: 5,0V	28: 5,0V	40: SDA	52: 11,059MHz	64: nc	76: 5,0V	4: Gnd
5: 3,3V	17: 0V	29: Gnd	41: 0V	53: 5,0V	65: 5,0V	77: Gnd	5: SDA
6: 2,5V	18: 5,0V	30: 0V / 5,0V (Reset)	42: 0,9V	54: Gnd	66: 5,0V	78: nc	6: SCL
7: 3,1V / 0V (Ign Off)	19: 5,0V	31: 5,0V / 0V	43: RCL	55: 0V / 5,0V (Eject)	67: Gnd	79: Gnd	7: Gnd
8: 0V	20: 5,0V	32: 5,0V / 0,3V (Set Off)	44: 5,0V	56: 5,0V	68: 0V	80: 5,0V	8: 5,0V
9: 4,2V	21: 5,0V	33: 0V	45: 5,0V	57: Data	69: 4,0V		
10: 4,7V	22: 5,0V	34: 0V / 5,0V	46: 0V	58: 0V	70: FSDA		
11: 2,0 - 6,0V	23: nc	35: Data	47: 0V	59: 5,0V / 0V (MSS)	71: FSCL		

SLAVE µ-PROCESSOR, CAN-BUS INTERFACE



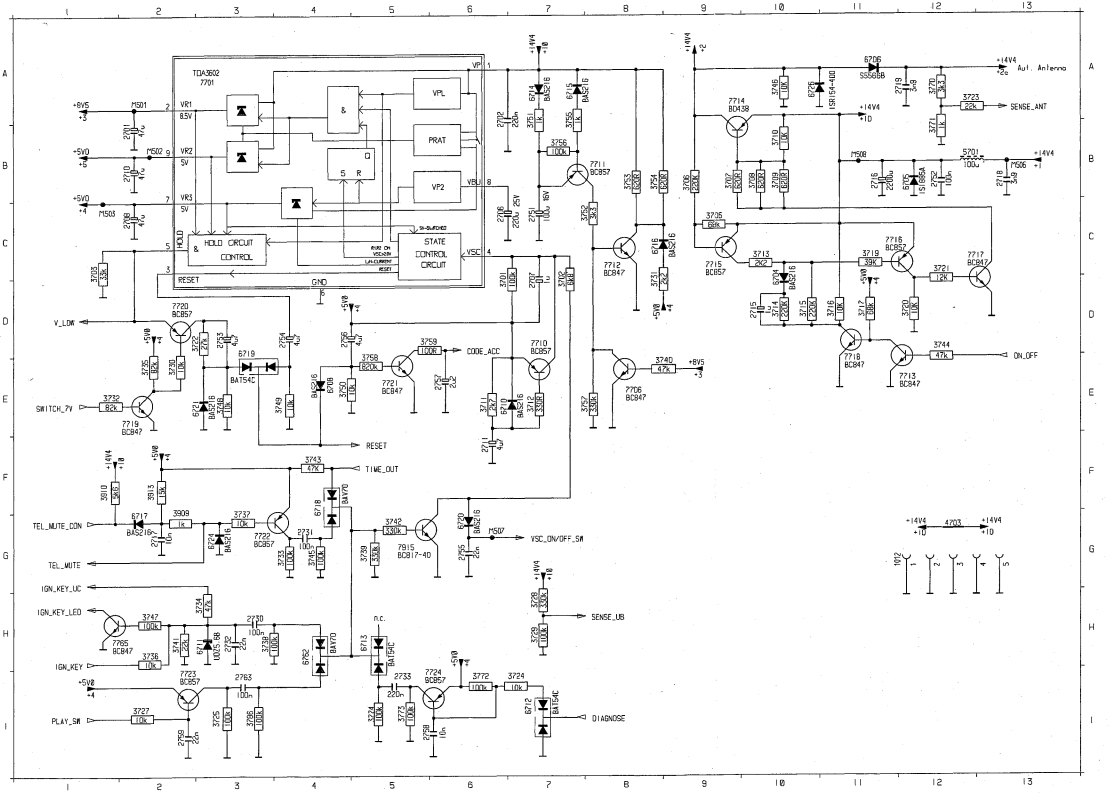
83 CE654	PCF 82C200
1: nc	1: Data
2: SCL	2: Data
3: SDA	3: 1,5V
4: 0V / 5,0V (Reset)	4: Gnd
5: nc	5: Data
6: Gnd	6: Data
7: nc	7: nc
8: Data	8: Gnd
9: Data	9: 16MHz
10: Data	10: 16MHz
11: Data	11: 5,0V
12: Data	12: 5,0V
13: Data	13: Data
14: 16MHz	14: nc
15: 16MHz	15: Gnd
16: Gnd	16: Data
17: 5,0V	17: 5,0V
18: 5,0V	18: 5,0V
19: 5,0V	19: 4,2V
20: 5,0V	20: 2,5V
21: 0V (FE) / 5,0V (ME)	21: Gnd
22: 0V	22: 5,0V
23: 5,0V	23: Data
24: nc	24: Data
25: 5,0V	25: Data
26: 5,0V	26: Data
27: 1,5V	27: Data
28: Gnd	28: Data
29: 5,0V	
30: Data	**PCA 82C250**
31: Data	1: Data
32: Data	2: Gnd
33: Data	3: 5,0V
34: Data	4: Data
35: Data	5: 2,5V
36: Data	6: 2,5V
37: Data	7: 2,5V
38: 5,0V	8: 2,5V
39: Gnd	
40: 0V / 5,0V	
41: 0V / 5,0V	
42: 5,0V	
43: 4,2V / 0V (On)	
44: Data	

FRONT, FRONT CONNECTION



POWER SUPPLY, ON/OFF LOGIC

1012 G12	2719 A12	2758 I 5	3711 E 6	3724 I 7	3737 G 3	3749 E 3	3771 B12	6706 A11	6720 G 6	7715 C 9	M501 A 2
2701 B 2	2730 H 5	2759 I 2	3712 E 7	3725 I 3	3738 H 3	3750 E 4	3772 I 6	6709 E 4	6721 E 3	7716 C11	M502 B 2
2702 A 6	2731 G 4	2763 I 3	3713 D10	3727 I 2	3739 G 5	3751 A 7	3773 I 5	6710 E 6	6724 G 3	7717 C12	M503 C 1
2706 C 6	2732 H 3	3701 D 6	3714 D10	3728 H 7	3740 E 9	3752 C 8	3774 I 5	6711 H 3	6726 A10	7718 E11	M506 B13
2707 D 7	2733 I 5	3702 D 7	3715 D10	3729 H 7	3741 H 2	3753 B 8	3786 I 3	6712 I 7	6762 H 4	7719 E 2	M507 G 6
2708 C 2	2751 C 7	3703 C 1	3716 D11	3730 E 2	3742 G 5	3754 B 8	3909 G 2	6713 H 5	7701 A 3	7720 D 2	M508 B11
2710 B 2	2752 B12	3705 C 9	3717 D11	3731 D 8	3743 F 4	3755 A 7	3910 F 1	6714 A 7	7706 E 9	7721 E 5	
2711 F 6	2753 D 3	3706 B 9	3719 C11	3732 E 1	3744 D12	3756 B 7	3913 F 2	6715 A 7	7710 D 7	7722 G 3	
2715 D10	2754 D 4	3707 B 9	3720 D12	3733 G 4	3745 G 4	3757 E 8	4703 G12	6716 C 8	7711 B 8	7723 I 2	
2716 B11	2755 G 6	3708 B10	3721 C12	3734 H 3	3746 A10	3758 E 5	5701 B12	6717 G 2	7712 C 8	7724 H 5	
2717 G 2	2756 D 4	3709 B10	3722 D 3	3735 E 2	3747 H 2	3759 D 5	6704 D10	6718 G 4	7713 E12	7765 H 2	
2718 B13	2757 E 6	3710 B10	3723 A12	3736 H 2	3748 E 3	3770 A12	6705 B12	6719 D 3	7714 A 9	7915 G 5	



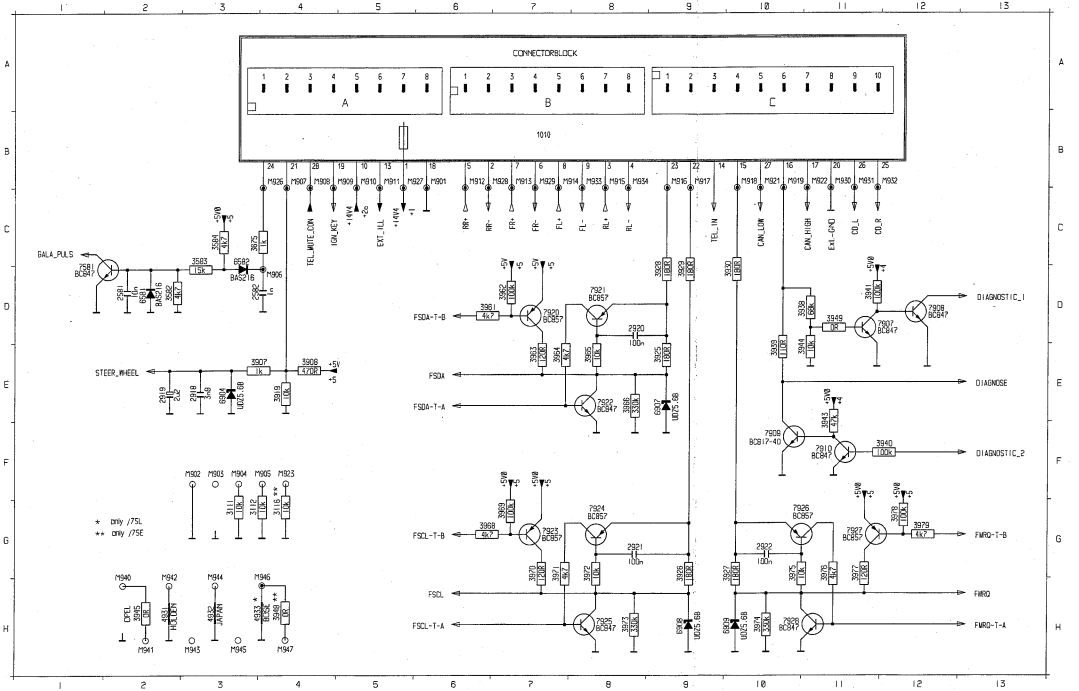
TDA 3602

	Set On	Set Off
1:	14,4V	14,4V
2:	8,5V	0V
3:	4,9V	0V
4:	0,3V	4,9V
5:	4,9V	0,3V
6:	Gnd	Gnd
7:	5,0V	5,0V
8:	14,0V	14,0V
9:	5,0V	0,2V

CONNECTOR BLOCK

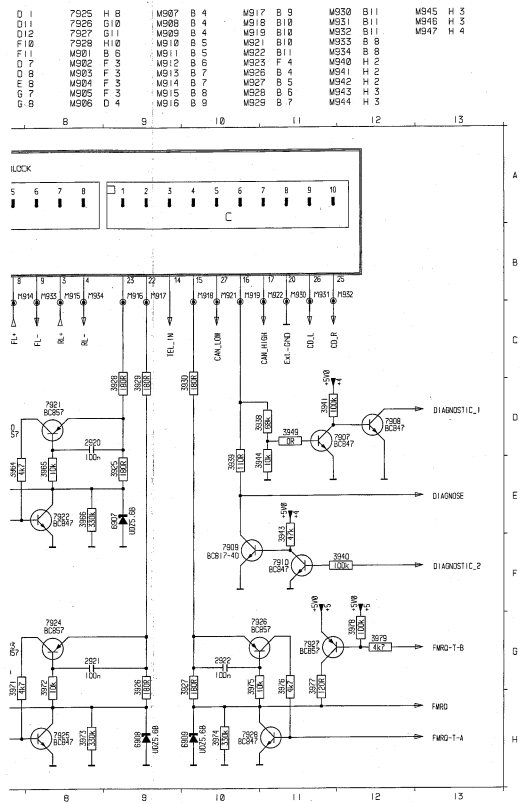
1010	B 7	3116	G 4	3927	G10	3945	H 2	3969	G 7	3979	G12	7581	D 1	7925	H 8
2581	D 2	3582	D 2	3928	D 9	3948	H 4	3970	G 7	4931	H 2	7907	D11	7926	G10
2582	D 3	3583	C 3	3929	D 9	3949	D11	3971	G 7	4932	H 3	7908	D12	7927	G11
2918	E 3	3584	C 3	3930	D10	3961	D 6	3972	G 8	4933	H 4	7928	H10	7928	H10
2919	E 2	3675	C 3	3938	D11	3962	D 7	3973	H 8	6581	D 2	7910	F11	M901	B 6
2920	D 8	3907	E 4	3939	E10	3963	E 7	3974	H10	6582	C 3	7920	D 7	M902	F 3
2921	G 8	3908	E 4	3940	F12	3964	E 7	3975	G10	6904	E 3	7921	D 8	M903	F 3
2922	G10	3919	E 4	3941	D11	3965	E 8	3976	G11	6907	E 9	7922	E 8	M904	F 3
3111	G 3	3925	E 9	3943	E11	3966	E 8	3977	G11	6908	H 9	7923	G 7	M905	F 3
3112	G 3	3926	G 9	3944	E11	3968	G 6	3978	G12	6909	H10	7924	G 8	M906	D 4

M907	B 4	M917	B 9	M930	B11	M945	H 3
M908	B 4	M918	B10	M931	B11	M946	H 3
M909	B 4	M919	B10	M932	B11	M947	H 4
M910	B 5	M921	B10	M933	B 8		
M911	B 5	M922	B11	M934	B 8		
M912	B 6	M923	F 4	M940	H 2		
M913	B 7	M926	B 4	M941	H 2		
M914	B 7	M927	B 5	M942	H 2		
M915	B 8	M928	B 6	M943	H 3		
M916	B 9	M929	B 7	M944	H 3		



Termi

A/D_E
A/D_E
A/D_E
A/D_E
BLINK
CAN_I
CAN_I
CAS-M
CASS_
CASS_
CD_L
CD_M
CD_R
CODE
DIAGN
DIAGN
DIAGN
DOLB
EXT_IL
EXTNI
EXTNI
FL
FL+
FL-
FMRQ
FMRQ
FMRQ
FR
FR+
FR-
FSCL
FSCL-
FSCL-
FSDA
FSDA-
FSDA-
GALA_
IGN_K
IGN_K
IGN_K
ILL_IN
INLOC
KEYM
KEYM
KEYM
KEYM
KEYM
KEYM
KEYM
KEYM
LEVEL
ME/FE
MOTO
MSS
MULTI
MUTE
MUTE_



INTERCONNECTION TABLE

Terminal	Pages
A/D_EXP_1	11, 13
A/D_EXP_2	11, 13
A/D_EXP_3	11, 13
A/D_EXP_OUT	11, 13
BLINK_LED	12, 13
CAN_HIGH	12, 15
CAN_LOW	12, 15
CAS-MUTE	8, 12
CASS_L	8, 12
CASS_R	8, 12
CD_L	12, 15
CD_MRQ	11, 12
CD_R	12, 15
CODE_ACC	11, 14
DIAGNOSE	14, 15
DIAGNOSTIC_1	11, 15
DIAGNOSTIC_2	11, 15
DOLBY_ON/OFF	8, 12
EXT_ILL	13, 15
EXTNF_L	9, 12
EXTNF_R	9, 12
FL	9, 10
FL+	10, 15
FL-	10, 15
FMRQ	11, 12, 15
FMRQ-T-A	12, 15
FMRQ-T-B	12, 15
FR	9, 10
FR+	10, 15
FR-	10, 15
FSCL	11, 12, 15
FSCL-T-A	12, 15
FSCL-T-B	12, 15
FSDA	11, 12, 15
FSDA-T-A	12, 15
FSDA-T-B	12, 15
GALA_PULS	11, 15
IGN_KEY	14, 15
IGN_KEY_LED	13, 14
IGN_KEY_UC	11, 14
ILL_IN	11, 13
INLOCK	7, 11
KEYMATRIX_A	11, 13
KEYMATRIX_B	11, 13
KEYMATRIX_C	11, 13
KEYMATRIX_D	11, 13
KEYMATRIX_E	11, 13
KEYMATRIX_F	11, 13
KEYMATRIX_G	11, 13
KEYMATRIX_H	11, 13
LEVEL	7, 11
ME/FE_SW	8 (2x), 12
MOTOR_ON/OFF	8, 11
MSS	8, 11
MULTIPATH	7, 13
MUTE	10, 11
MUTE_SW	8 (2x), 11

Terminal	Pages
NOISE	7, 11
ON_OFF	11, 14
PAUSE	7, 11
PLAY_SW	8, 11, 14
RCL	7, 11
RDA	7, 11
RESET	11, 14
reset654	11, 12
RHEOSTAT	11, 13
RL	9, 10
RL+	10, 15
RL-	10, 15
ROGER BEEP	9, 11
ROT_SW_A	11, 13
ROT_SW_B	11, 13
RR	9, 10
RR+	10, 15
RR-	10, 15
SCL	7, 9, 11 (2x), 12
SDA	7, 9, 11 (2x), 12
SENSE_ANT	13, 14
SENSE_UB	11, 14
SKIP	8, 11
SOLENOID	8, 11
STEER_WHEEL	11, 15
SWITCH_7V	11, 14
TEL_IN	9, 15
TEL_MUTE	11, 14
TEL_MUTE_CON	14, 15
TERM	10, 13
TIME_OUT	11, 14
TRACK_SW	8 (2x), 11
TU_L	7, 9
TU_R	7, 9
V_LOW	11, 14
V_REF	7, 11
VSC_ON/OFF_SW	11, 13, 14

Power Supply

+1	(14V4)	14, 15
+2	(14V4)	13, 14
+2c	(14V4)	14, 15
+3	(8,5V)	7, 8, 9, 12, 14
+3d	(8,5V)	9, 12
+4	(5V)	8, 11, 12, 13, 14, 15
+5	(5V)	7, 8, 10, 11, 12, 13, 14, 15
+5d	(5V)	12
+7	(5V)	11
+10	(14V4)	8, 10, 14

ELECTRICAL PARTS LIST

Miscellaneous				
1001	4822 210 10729	TUNER	TUNER IC96	
1002	4822 265 10808	CONNECTOR	10P	
1004	4822 267 40818	CONNECTOR	TCS83S9V1 BURNDY	
1007	4822 265 10908	CONNECTOR	10P	
1009	4822 265 10599	CONNECTOR	10P -INNOVAN-	
1010	4822 265 10814	CONNECTOR	CONN. BLOCK ASSY	
	PWB CONNECTORBLOCK ASSY ----------			
2001	4822 122 31767	CERAMIC SMD	150pF 2%NP0 63V	
2002	4822 122 31767	CERAMIC SMD	150pF 2%NP0 63V	
2004	4822 122 31767	CERAMIC SMD	150pF 2%NP0 63V	
2005	4822 122 31767	CERAMIC SMD	150pF 2%NP0 63V	
2021	4822 122 31767	CERAMIC SMD	150pF 2%NP0 63V	
2022	4822 122 31767	CERAMIC SMD	150pF 2%NP0 63V	

1103	4822 242 81961	CRYSTAL	16.0MHz	
1104	4822 242 81961	CRYSTAL	16.0MHz	
1332	4822 100 11752	RESISTOR, VAR	POT FADER	
1333	4822 100 11752	RESISTOR, VAR	POT BASS	
1334	4822 100 11752	RESISTOR, VAR	POT TREBLE	
1336	4822 100 12255	RESISTOR, VAR	POT VOLUME	
1402	4822 242 72195	CRYSTAL	4.332MHz	
1911	4822 242 81646	CRYSTAL	11.059MHz	
Capacitors				
2004	5322 122 33538	CERAMIC SMD	150pF 2% NP0 63V	
2006	5322 122 32531	CERAMIC SMD	100pF 5% NP0 50V	
2007	5322 122 32531	CERAMIC SMD	100pF 5% NP0 50V	
2101	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	
2102	4822 124 23279	ELECTROLYTIC ALU.	22µF 20% 16V	
2103	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	
2104	5322 122 32531	CERAMIC SMD	100pF 5% NP0 50V	
2105	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V	
2108	4822 126 13689	CERAMIC SMD	18pF 1% NP0 63V	
2109	4822 126 13693	CERAMIC SMD	56pF 1% NP0 63V	
2110	5322 122 33869	CERAMIC SMD	15pF 5% NP0 63V	
2111	5322 122 33869	CERAMIC SMD	15pF 5% NP0 63V	
2113	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2115	4822 124 23582	ELECTROLYTIC ALU.	220µF 10V	
2120	5322 122 32531	CERAMIC SMD	100pF 5% NP0 50V	
2121	5322 122 32531	CERAMIC SMD	100pF 5% NP0 50V	
2122	5322 122 32531	CERAMIC SMD	100pF 5% NP0 50V	
2128	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2135	5322 122 32531	CERAMIC SMD	100pF 5% NP0 50V	
2136	5322 122 32531	CERAMIC SMD	100pF 5% NP0 50V	
2137	5322 122 32531	CERAMIC SMD	100pF 5% NP0 50V	
2138	5322 122 32531	CERAMIC SMD	100pF 5% NP0 50V	
2139	5322 122 32531	CERAMIC SMD	100pF 5% NP0 50V	
2140	5322 122 32531	CERAMIC SMD	100pF 5% NP0 50V	
2351	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	
2352	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2355	4822 124 81195	ELECTROLYTIC ALU.	100µF 20% 16V	
2357	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	
2358*	4822 124 23262	ELECTROLYTIC ALU.	0.1µF 50V	
2358**	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	
2360	4822 124 81195	ELECTROLYTIC ALU.	100µF 20% 16V	
2362*	4822 124 23262	ELECTROLYTIC ALU.	0.1µF 50V	
2362**	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	
2363	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V	
2368	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2370	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2371	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2372	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2373	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V	
2401	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	
2402	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	
2403	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V	
2406	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2408	4822 124 22646	ELECTROLYTIC ALU.	47µF 20% 16V	
2409	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	
2410	5322 122 32452	CERAMIC SMD	47pF 5% NP0 63V	
2411	5322 122 31946	CERAMIC SMD	27pF 5% NP0 63V	
2412	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2413	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2414	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	
2415	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2420	5322 122 33538	CERAMIC SMD	150pF 2% NP0 63V	
2421	5322 122 33538	CERAMIC SMD	150pF 2% NP0 63V	
2423	5322 122 33538	CERAMIC SMD	150pF 2% NP0 63V	
2424	5322 122 33538	CERAMIC SMD	150pF 2% NP0 63V	
2425	5322 122 32448	CERAMIC SMD	10pF 5% 50V	
2427	4822 122 33575	CERAMIC SMD	220pF 5% NPO 50V	
2430 *	4822 124 80765	ELECTROLYTIC ALU.	4.7µF 20% 35V	
2431	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V	
2432	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2437	5322 122 32448	CERAMIC SMD	10pF 5% 50V	
2438	5322 122 32448	CERAMIC SMD	10pF 5% 50V	
2527	5322 122 32268	CERAMIC SMD	470pF 10% 50V	
2528	5322 122 32268	CERAMIC SMD	470pF 10% 50V	
2529	5322 122 32268	CERAMIC SMD	470pF 10% 50V	
2530	5322 122 32268	CERAMIC SMD	470pF 10% 50V	
2531	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V	
2532	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V	
2533	4822 124 80453	ELECTROLYTIC ALU.	100µF 20% 10V	
2534	4822 124 80453	ELECTROLYTIC ALU.	100µF 20% 10V	
2535	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V	
2539	4822 126 13188	CERAMIC SMD	15nF 5% X7R 63V	
2540	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2541	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2546	4822 126 13188	CERAMIC SMD	15nF 5% X7R 63V	
2580	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2601	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V	
2602	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V	
2604	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V	
2605	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V	
2606	4822 126 13851	CERAMIC SMD	68nF 10% 16V	
2607	4822 124 23279	ELECTROLYTIC ALU.	22µF 20% 16V	
2608	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2609	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2611	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2612	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2613*	4822 126 13852	CERAMIC SMD	39nF 10% 25V	
2613**	4822 126 13851	CERAMIC SMD	68nF 10% 16V	
2616*	4822 126 14165	CERAMIC SMD	100nF 10% 25V	
2616**	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2617	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2618*	4822 126 13852	CERAMIC SMD	39nF 10% 25V	
2618**	4822 126 13851	CERAMIC SMD	68nF 10% 16V	
2620	4822 124 23582	ELECTROLYTIC ALU.	220µF 10V	
2621	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V	
2622	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V	
2623	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2624	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2625	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2626*	4822 126 14165	CERAMIC SMD	100nF 10% 25V	
2626**	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2627*	4822 126 14165	CERAMIC SMD	100nF 10% 25V	
2627**	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2628	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2629*	4822 126 14165	CERAMIC SMD	100nF 10% 25V	
2629**	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2630**	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2631**	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2665	4822 126 13851	CERAMIC SMD	68nF 10% 16V	
2701	4822 124 80724	ELECTROLYTIC ALU.	47µF 20% 10V	
2702	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2706	4822 124 41097	ELECTROLYTIC ALU.	220µF 20% 16V	
2707	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V	
2708	4822 124 80724	ELECTROLYTIC ALU.	47µF 20% 10V	
2710	4822 124 22646	ELECTROLYTIC ALU.	47µF 20% 16V	
2711	4822 124 80727	ELECTROLYTIC ALU.	4.7µF 20% 25V	
2715	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V	
2716	4822 124 80769	ELECTROLYTIC ALU.	2200µF 20% 16V	
2730	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2731	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2733	4822 126 13849	CERAMIC SMD	220nF 10% 16V	
2751	4822 124 81195	ELECTROLYTIC ALU.	100µF 20% 16V	
2752	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2753	4822 124 80727	ELECTROLYTIC ALU.	4.7µF 20% 25V	
2754	4822 124 80727	ELECTROLYTIC ALU.	4.7µF 20% 25V	
2756	4822 124 80765	ELECTROLYTIC ALU.	4.7µF 20% 35V	
2757	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	
2760	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V	
2761	4822 126 13851	CERAMIC SMD	68nF 10% 16V	
2762	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V	
2763	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2765	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2766	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V	
2767	4822 124 41097	ELECTROLYTIC ALU.	220µF 20% 16V	
2906	4822 122 33342	CERAMIC SMD	33nF 10% X7R 63V	
2907	4822 122 33342	CERAMIC SMD	33nF 10% X7R 63V	
2908	4822 122 33342	CERAMIC SMD	33nF 10% X7R 63V	
2913	4822 126 13689	CERAMIC SMD	18pF 1% NP0 63V	
2914	4822 126 13693	CERAMIC SMD	56pF 1% NP0 63V	
2915	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V	
2916	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2917	4822 126 13848	CERAMIC SMD	100nF 10% 16V	
2919	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	
2920	4822 126 14165	CERAMIC SMD	100nF 10% 25V	
2921	4822 126 14165	CERAMIC SMD	100nF 10% 25V	
2922	4822 126 14165	CERAMIC SMD	100nF 10% 25V	
2923	4822 122 33342	CERAMIC SMD	33nF 10% X7R 63V	
Resistors				
3366*	4822 116 30426		4k7 3% 0.1W	
3426	4822 100 12071	VAR	EVNDXAA03B25	
3518	4822 117 11449	CARBON	2k2 1% 0,1W	
3540	4822 100 11681	VAR	1k 30% 0,1W	
3543	4822 100 11681	VAR	1k 30% 0,1W	
3672	4822 117 11383		12k 1% 0,1W	
3674	4822 117 11449	CARBON	2k2 1% 0,1W	
3676	4822 116 83868		150R 5% 0,5W	
3713	4822 117 11449	CARBON	2k2 1% 0,1W	
3721	4822 117 11383		12k 1% 0,1W	
3731	4822 117 11449	CARBON	2k2 1% 0,1W	
3939	4822 116 52177		110R 5% 0,5W	
3945	4822 117 12764	CARBON	0R05 0,25W	
3948	4822 117 12764	CARBON	0R05 0,25W	

Note: Positions marked with " * " are only for /75L
Positions marked with " ** " are only for /75E

24 41017	ELECTROLYTIC ALU.	10µF 16V	2626**	4822 126 13849	CERAMIC SMD	220nF 10% 16V
24 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	2627*	4822 126 14165	CERAMIC SMD	100nF 10% 25V
24 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	2627**	4822 126 13849	CERAMIC SMD	220nF 10% 16V
24 41017	ELECTROLYTIC ALU.	10µF 16V	2628	4822 126 13849	CERAMIC SMD	220nF 10% 16V
26 13848	CERAMIC SMD	100nF 10% 16V	2629*	4822 126 14165	CERAMIC SMD	100nF 10% 25V
24 22646	ELECTROLYTIC ALU.	47µF 20% 16V	2629**	4822 126 13849	CERAMIC SMD	220nF 10% 16V
24 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	2630**	4822 126 13849	CERAMIC SMD	220nF 10% 16V
22 32452	CERAMIC SMD	47pF 5% NP0 63V	2631**	4822 126 13849	CERAMIC SMD	220nF 10% 16V
22 31946	CERAMIC SMD	27pF 5% NP0 63V	2665	4822 126 13851	CERAMIC SMD	68nF 10% 16V
26 13848	CERAMIC SMD	100nF 10% 16V	2701	4822 124 80724	ELECTROLYTIC ALU.	47µF 20% 10V
26 13848	CERAMIC SMD	100nF 10% 16V	2702	4822 126 13849	CERAMIC SMD	220nF 10% 16V
24 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V	2706	4822 124 41097	ELECTROLYTIC ALU.	220µF 20% 16V
26 13848	CERAMIC SMD	100nF 10% 16V	2707	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V
22 33538	CERAMIC SMD	150pF 2% NP0 63V	2708	4822 124 80724	ELECTROLYTIC ALU.	47µF 20% 10V
22 33538	CERAMIC SMD	150pF 2% NP0 63V	2710	4822 124 22646	ELECTROLYTIC ALU.	47µF 20% 16V
22 33538	CERAMIC SMD	150pF 2% NP0 63V	2711	4822 124 80727	ELECTROLYTIC ALU.	4.7µF 20% 25V
22 33538	CERAMIC SMD	150pF 2% NP0 63V	2715	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V
22 32448	CERAMIC SMD	10pF 5% 50V	2716	4822 124 80769	ELECTROLYTIC ALU.	2200µF 20% 16V
22 33575	CERAMIC SMD	220pF 5% NPO 50V	2730	4822 126 13848	CERAMIC SMD	100nF 10% 16V
24 80765	ELECTROLYTIC ALU.	4.7µF 20% 35V	2731	4822 126 13848	CERAMIC SMD	100nF 10% 16V
24 41017	ELECTROLYTIC ALU.	10µF 16V	2733	4822 126 13849	CERAMIC SMD	220nF 10% 16V
26 13848	CERAMIC SMD	100nF 10% 16V	2751	4822 124 81195	ELECTROLYTIC ALU.	100µF 20% 16V
22 32448	CERAMIC SMD	10pF 5% 50V	2752	4822 126 13848	CERAMIC SMD	100nF 10% 16V
22 32448	CERAMIC SMD	10pF 5% 50V	2753	4822 124 80727	ELECTROLYTIC ALU.	4.7µF 20% 25V
22 32268	CERAMIC SMD	470pF 10% 50V	2754	4822 124 80727	ELECTROLYTIC ALU.	4.7µF 20% 25V
22 32268	CERAMIC SMD	470pF 10% 50V	2756	4822 124 80765	ELECTROLYTIC ALU.	4.7µF 20% 35V
22 32268	CERAMIC SMD	470pF 10% 50V	2757	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V
22 32268	CERAMIC SMD	470pF 10% 50V	2760	4822 124 23282	ELECTROLYTIC ALU.	1µF 20% 50V
24 41017	ELECTROLYTIC ALU.	10µF 16V	2761	4822 126 13851	CERAMIC SMD	68nF 10% 16V
24 41017	ELECTROLYTIC ALU.	10µF 16V	2762	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V
24 80453	ELECTROLYTIC ALU.	100µF 20% 10V	2763	4822 126 13848	CERAMIC SMD	100nF 10% 16V
24 80453	ELECTROLYTIC ALU.	100µF 20% 10V	2765	4822 126 13848	CERAMIC SMD	100nF 10% 16V
24 41017	ELECTROLYTIC ALU.	10µF 16V	2766	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V
26 13188	CERAMIC SMD	15nF 5% X7R 63V	2767	4822 124 41097	ELECTROLYTIC ALU.	220µF 20% 16V
26 13848	CERAMIC SMD	100nF 10% 16V	2906	4822 122 33342	CERAMIC SMD	33nF 10% X7R 63V
26 13848	CERAMIC SMD	100nF 10% 16V	2907	4822 122 33342	CERAMIC SMD	33nF 10% X7R 63V
26 13188	CERAMIC SMD	15nF 5% X7R 63V	2908	4822 122 33342	CERAMIC SMD	33nF 10% X7R 63V
26 13848	CERAMIC SMD	100nF 10% 16V	2913	4822 126 13689	CERAMIC SMD	18pF 1% NP0 63V
24 23282	ELECTROLYTIC ALU.	1µF 20% 50V	2914	4822 126 13693	CERAMIC SMD	56pF 1% NP0 63V
24 23282	ELECTROLYTIC ALU.	1µF 20% 50V	2915	4822 124 41017	ELECTROLYTIC ALU.	10µF 16V
24 23282	ELECTROLYTIC ALU.	1µF 20% 50V	2916	4822 126 13848	CERAMIC SMD	100nF 10% 16V
24 23282	ELECTROLYTIC ALU.	1µF 20% 50V	2917	4822 126 13848	CERAMIC SMD	100nF 10% 16V
26 13851	CERAMIC SMD	68nF 10% 16V	2919	4822 124 23504	ELECTROLYTIC ALU.	2.2µF 20% 50V
24 23279	ELECTROLYTIC ALU.	22µF 20% 16V	2920	4822 126 14165	CERAMIC SMD	100nF 10% 25V
26 13849	CERAMIC SMD	220nF 10% 16V	2921	4822 126 14165	CERAMIC SMD	100nF 10% 25V
26 13848	CERAMIC SMD	100nF 10% 16V	2922	4822 126 14165	CERAMIC SMD	100nF 10% 25V
26 13849	CERAMIC SMD	220nF 10% 16V	2923	4822 122 33342	CERAMIC SMD	33nF 10% X7R 63V
26 13849	CERAMIC SMD	220nF 10% 16V	**Resistors**			
26 13852	CERAMIC SMD	39nF 10% 25V	3366*	4822 116 30426		4k7 3% 0,1W
26 13851	CERAMIC SMD	68nF 10% 16V	3426	4822 100 12071	VAR	EVNDXAA03B25
26 14165	CERAMIC SMD	100nF 10% 25V	3518	4822 117 11449	CARBON	2k2 1% 0,1W
26 13849	CERAMIC SMD	220nF 10% 16V	3540	4822 100 11681	VAR	1k 30% 0,1W
26 13849	CERAMIC SMD	220nF 10% 16V	3543	4822 100 11681	VAR	1k 30% 0,1W
26 13852	CERAMIC SMD	39nF 10% 25V	3672	4822 117 11383		12k 1% 0,1W
26 13851	CERAMIC SMD	68nF 10% 16V	3674	4822 117 11449	CARBON	2k2 1% 0,1W
24 23582	ELECTROLYTIC ALU.	220µF 10V	3676	4822 116 83868		150R 5% 0,5W
24 23282	ELECTROLYTIC ALU.	1µF 20% 50V	3713	4822 117 11449	CARBON	2k2 1% 0,1W
24 23282	ELECTROLYTIC ALU.	1µF 20% 50V	3721	4822 117 11383		12k 1% 0,1W
26 13849	CERAMIC SMD	220nF 10% 16V	3731	4822 117 11449	CARBON	2k2 1% 0,1W
26 13849	CERAMIC SMD	220nF 10% 16V	3939	4822 116 52177		110R 5% 0,5W
26 13849	CERAMIC SMD	220nF 10% 16V	3945	4822 117 12764	CARBON	0R05 0,25W
26 14165	CERAMIC SMD	100nF 10% 25V	3948	4822 117 12764	CARBON	0R05 0,25W

Coils			
5000	4822 157 71267		BLM31BG01SPT
5001	4822 157 71267		BLM31BG01SPT
5002	4822 157 71267		BLM31BG01SPT
5003	4822 157 71267		BLM31BG01SPT
5004	4822 157 71267		BLM31BG01SPT
5103	4822 157 71267		BLM31BG01SPT
5104	4822 157 71267		BLM31BG01SPT
5105	4822 157 71267		BLM31BG01SPT
5106	4822 157 71267		BLM31BG01SPT
5107	4822 157 11121		ZJY51R52PL(EMI 50V/2A)
5401	4822 156 21719		
5701	4822 157 70935		
5905	4822 152 20677		10µH
5909	4822 152 20677		10µH
Diodes			
6100	5322 130 34337		BAV99
6102	5322 130 34337		BAV99
6420	5322 130 34337		BAV99
6430	5322 130 34337		BAV99
6502	4822 130 83757		BAS216
6581	4822 130 83757		BAS216
6582	4822 130 83757		BAS216
6601	4822 130 83757		BAS216
6704	4822 130 83757		BAS216
6705	4822 130 80751	POWER RECTIFIER	1S1885A
6706	4822 130 81196	POWER RECTIFIER	S5566B
6708	4822 130 83757		BAS216
6710	4822 130 83757		BAS216
6711	4822 130 10185	REFERENCE	UDZ5.6B
6712	4822 130 82594		BAT54C
6713	4822 130 82594		BAT54C
6714	4822 130 83757		BAS216
6715	4822 130 83757		BAS216
6716	4822 130 83757		BAS216
6717	4822 130 83757		BAS216
6718	5322 130 34331		BAV70
6719	4822 130 82594		BAT54C
6720	4822 130 83757		BAS216
6721	4822 130 83757		BAS216
6722	4822 130 83757		BAS216
6723	4822 130 83757		BAS216
6724	4822 130 83757		BAS216
6726	4822 130 10655	POWER RECTIFIER	1SR154-400
6761	4822 130 10185	REFERENCE	UDZ5.6B
6762	5322 130 34331		BAV70
6904	4822 130 10185	REFERENCE	UDZ5.6B
6905	4822 130 10185	REFERENCE	UDZ5.6B
6907	4822 130 10185	REFERENCE	UDZ5.6B
6908	4822 130 10185	REFERENCE	UDZ5.6B
6909	4822 130 10185	REFERENCE	UDZ5.6B
6920	4822 130 83757		BAS216
6921	4822 130 83757		BAS216
6922	4822 130 83757		BAS216
Transistors and Integrated Circuits			
7102	5322 209 14542	MOS STANDARD LOGIC	HEF4066BT
7103	4822 209 15927	MOS µ-PROCESSOR	S87C654-5B44 + RC4 DC397 (089)
7104	4822 209 15195	DIG MOS	PCF82C200T
7105	4822 209 15196	DIG MOS	PCA82C250
7350	4822 209 33629	ANA	TDA7375
7351	4822 209 33629	ANA	TDA7375
7352	4822 130 60511	TRANSISTOR, <1W	BC847B

Note: Positions marked with " * " are only for /75L
Positions marked with " ** " are only for /75E

7401	4822 209 83159	ANA	LA2000 (SANYO)
7403	4822 209 90304	ANA	TDA7330BD
7420	4822 209 32742	ANA AMPLIFIER	TL074IN
7503	4822 130 60511	TRANSISTOR, <1W	BC847B
7504	4822 130 60511	TRANSISTOR, <1W	BC847B
7505	4822 130 60511	TRANSISTOR, <1W	BC847B
7506	4822 130 41078	TRANSISTOR, <1W	BC640
7507	4822 130 60511	TRANSISTOR, <1W	BC847B
7508	5322 130 60508	TRANSISTOR, <1W	BC857B
7509	4822 130 60511	TRANSISTOR, <1W	BC847B
7510	4822 209 32744	ANA	TEA0675T/V1
7511	4822 130 60511	TRANSISTOR, <1W	BC847B
7513	4822 130 60511	TRANSISTOR, <1W	BC847B
7516	4822 130 60511	TRANSISTOR, <1W	BC847B
7581	4822 130 60511	TRANSISTOR, <1W	BC847B
7601	4822 209 32995	ANA	TDA7313
7602	4822 209 30095	ANA AMPLIFIER	LM833D
7662	4822 130 60511	TRANSISTOR, <1W	BC847B
7701	4822 209 33029	ANA	TDA3602/N3
7706	4822 130 60511	TRANSISTOR, <1W	BC847B
7710	5322 130 60508	TRANSISTOR, <1W	BC857B
7711	5322 130 60508	TRANSISTOR, <1W	BC857B
7712	4822 130 60511	TRANSISTOR, <1W	BC847B
7713	4822 130 60511	TRANSISTOR, <1W	BC847B
7714	4822 130 40995	TRANSISTOR, >=1W	BD438
7715	5322 130 60508	TRANSISTOR, <1W	BC857B
7716	5322 130 60508	TRANSISTOR, <1W	BC857B
7717	4822 130 60511	TRANSISTOR, <1W	BC847B
7718	4822 130 60511	TRANSISTOR, <1W	BC847B
7719	4822 130 60511	TRANSISTOR, <1W	BC847B
7720	5322 130 60508	TRANSISTOR, <1W	BC857B
7721	4822 130 60511	TRANSISTOR, <1W	BC847B
7722	5322 130 60508	TRANSISTOR, <1W	BC857B
7723	5322 130 60508	TRANSISTOR, <1W	BC857B
7724	5322 130 60508	TRANSISTOR, <1W	BC857B
7760	4822 130 60511	TRANSISTOR, <1W	BC847B
7761	4822 130 60511	TRANSISTOR, <1W	BC847B
7762	4822 130 60511	TRANSISTOR, <1W	BC847B
7763	4822 130 60511	TRANSISTOR, <1W	BC847B
7764	5322 130 60508	TRANSISTOR, <1W	BC857B
7765	4822 130 60511	TRANSISTOR, <1W	BC847B
7768	5322 130 60508	TRANSISTOR, <1W	BC857B
7769	4822 130 60511	TRANSISTOR, <1W	BC847B
7906	5322 209 11446	MOS STANDARD LOGIC	HEF4051BT
7907	4822 130 60511	TRANSISTOR, <1W	BC847B
7908	4822 130 60511	TRANSISTOR, <1W	BC847B
7909	4822 130 42615	TRANSISTOR, <1W	BC817-40
7910	4822 130 60511	TRANSISTOR, <1W	BC847B
7911	4822 209 15928	MOS µ-PROCESSOR	P87CE560EFB/019 + RC4 MAIN DC397 (089)
7912	5322 209 12323	MOS EEPROM	X24C16IP *(not programmed !)*
7915	4822 130 42615	TRANSISTOR, <1W	BC817-40
7920	5322 130 60508	TRANSISTOR, <1W	BC857B
7921	5322 130 60508	TRANSISTOR, <1W	BC857B
7922	4822 130 60511	TRANSISTOR, <1W	BC847B
7923	5322 130 60508	TRANSISTOR, <1W	BC857B
7924	5322 130 60508	TRANSISTOR, <1W	BC857B
7925	4822 130 60511	TRANSISTOR, <1W	BC847B
7926	5322 130 60508	TRANSISTOR, <1W	BC857B
7927	5322 130 60508	TRANSISTOR, <1W	BC857B
7928	4822 130 60511	TRANSISTOR, <1W	BC847B

Note: *For capacitors and resistors which are not mentioned in the parts list refer to Standard Component Catalogue of Philips Euroservice.*

MECHANICAL PARTS LIST

5	4822 492 71046	MOUNTING SPRING
7	4822 413 31857	KNOB VOLUME
8	4822 413 31664	KNOB FADER, BASS, TREBLE
9	4822 410 63788	KNOB ASSY FOR CASSETTE
11	4822 267 31697	CONNECTOR AERIAL
1001-1001	4822 210 10729	TUNER IC96
1001-1002	4822 265 10808	CON BM V 10P M 1.27 90715 B
1001-1004	4822 267 40818	CON BM V 5P F 2.54 90720 B
1001-1005-1332	4822 100 11752	POT FADER
1001-1005-1333	4823 100 11752	POT BASS
1001-1005-1334	4823 100 11752	POT TREBLE
1001-1006-1336	4822 100 12255	POT VOLUME
1001-1007	4822 265 10908	CON BM V 10P F 1.00 FFC 0.3 B
1001-1009	4822 265 10599	CONNECTOR SPRING -INNOVAN-
1001-1010	4822 265 10814	CONNECTOR BLOCK ASSY
1002	4822 691 10556	TAPE DECK LCA*1-4/1
1003-1800	4822 459 50945	DETACHABLE UNIT
1003-1805	4822 459 04416	ORNAMENTAL PLATE ASSY 22DC397/75L (CCR600)
1003-1805	4822 459 04779	ORNAMENTAL PLATE ASSY 22DC397/75E (CCR800)
1003-1805-4	4822 443 10496	CASSETTE FLAP 22DC397/75L (CCR600)
1003-1805-4	4822 443 10835	CASSETTE FLAP 22DC397/75E (CCR800)
1003-1805-17	4822 492 42533	SPRING CASSETTE FLAP
	4822 736 14804	DIRECTIONS FOR USE
*	4822 901 10023	EEPROM DATA DISKETTE 22DC397/75L (CCR600)
**	4822 901 10022	EEPROM DATA DISKETTE 22DC397/75E (CCR800) *(to update your Gateway software)*

Note: Positions marked with " * " are only for /75L
Positions marked with " ** " are only for /75E